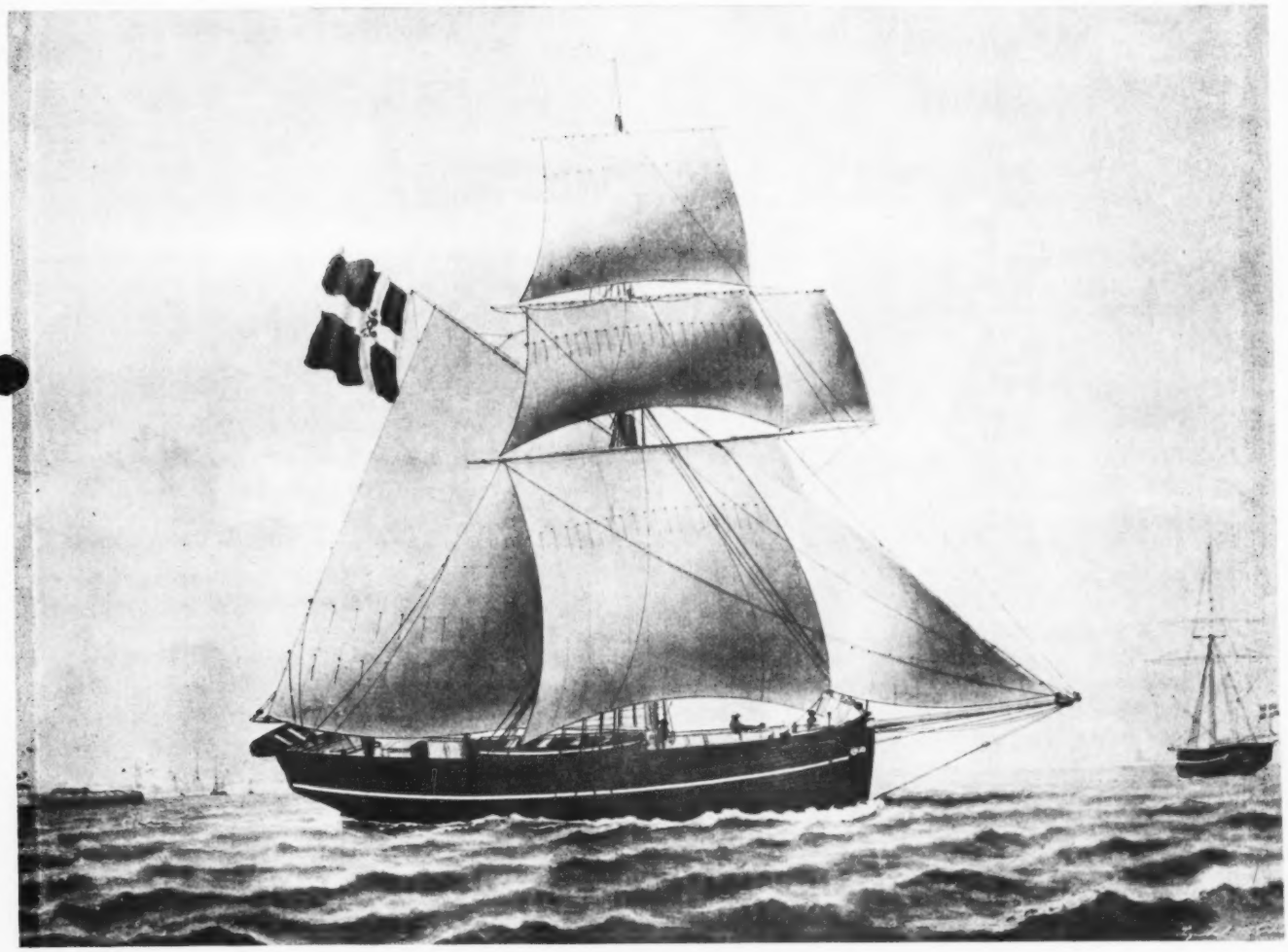
NAUTICAL RESEARCH JOURNAL

PUBLISHED BY THE NAUTICAL RESEARCH GUILD

Secretary-Treasurer
JAMES W. HARBIN, JR.
4110 Beall Street
LANDOVER HILLS, MARYLAND

Vol. 10 No. 2



Eagle Carving by Richard Orr
Cover Painting from the Karl F. Wede Collection

MEMORIES OF CRUISES ON BOSTON PILOT BOATS OF LONG AGO

By Charles I. Lampee

The schooner lay hove to, rocking gently on the waves from a light early morning breeze. "Smoke-O" came the cry from the Boatkeeper perched on the main crosstrees.

The word was quickly passed from the standing room to the cabin and the "Skipper" suddenly appeared, standing on the topmost step of the companion ladder, bare headed and clad only in his long underwear and red flannel shirt.

"What d'yer make, Peter?" he sung out and the reply came down from aloft, "A steamer, Sir, heading right at us, a point or so abaft the fore rigging."

The 'old man' smacked his lips and chortled, "Ha, a steamer, giver a gun, - - - -.- - her!"

This reminiscence of sixty-five years ago has ever since remained engraved on my memory.

Pilot schooner COLUMBIA, courtesy of Miss Katherine Rogers, Second Bank State Street Co., Boston

I became interested in piloting at an early age, for both of my grandfathers, Capt. William R. Lampee and Capt. Thomas Cooper, were veteran Boston pilots and when home at the same time I listened avidly to their conversation of pilot boats mingled with the jargon of the sea.

THE BOATS, PILOTS AND CREWS

Those were the days of competitive piloting, boat against boat, and except for the compulsory duties of rotating for a week on the Boston Light and another on the Cape Cod stations, the schooners were free to go wherever they chose, and some went a long distance from Boston, looking for steam and sail liable for pilotage.

At the times of which I write there were eight pilot schooners in service. No. 1, the FLORENCE, the oldest, built in 1867, later succeeded by the AMERICA; No. 2, EBEN D. JORDAN, later replaced by the ill-fated COLUMBIA; No. 3, D. J. LAWLOR, sunk by collision in a gale of wind with the fisherman HORACE B. PARKER in the winter of 1893, her number was later given to the LIBERTY; No. 4, ADAMS; No. 5, HESPER; No. 6, VARUNA; No. 7, FRIEND and No. 8, SYLPH.

These boats were sturdily built to withstand the rigors of winter cruising and designed for speed as well. They ranged in size from the FLORENCE of 49.63 gross tonnage, length 66 - 5 feet, to the HESPER 98.44 gross tons, 92 feet long and the LIBERTY 118.25 tons gross and 93.6 feet overall.

Their offensive equipment, if I may use the term, consisted of two canoes, or yawls as they are called today, of lapstreak construction and generous proportions. They were placed on either side of the fore hatch resting bottom up on skids secured to the deck and fastened by gripes. To launch, the canoe on the lee side was up ended, slewed around at an angle to the rail and pushed overboard stern first. The painter, being handed outside the main rigging was belayed to the cleat or a bitt on deck and the pilot preceeded by the two men who were to row jumped in and the painter slacked off to allow the canoe to clear the schooner's stern. When the pilot sung out "Let go" the painter was cast off and the canoe proceeded under oars to the vessel to be boarded.

When the canoe returned to the pilot boat the fore and main burtons or burdens, as they were called, were hooked on and the craft was hoisted up on deck, overturned and set once again upon her skids.

A copious supply of rockets and blue lights was kept for night signalling and last but not least was the signal gun. This was of composition metal and when fired gave a clear sharp report that carried for a considerable distance. When not in use the gun and carriage were covered by a canvas jacket and lashed to ring bolts in the deck just forward of the companion way.

I had thought it was only used in foggy weather but was soon enlightened when it was fired on fair days as well. The firing of the gun, a muzzle loader, was an exciting experience in my young life. The gun freed from its covering and lashings was hauled to the windward rail and secured with breechings. When on the boat I was the powder monkey and brought the charge from below up to the loader. The coarse grained powder was put up in peanut bags and kept in a metal container. I was Jim Hawkins of Treasure Island fame and Peter was Israel Hands, Capt. Flint's gunner. The first boatkeeper always had the post of honor. The Percussion cap attached to a long lanyard was inserted in the vent and Peter holding the cord taut with his right hand brought his left smartly down on the line; the cap exploded the charge and I looked anxiously to see if we had hulled the lumbering merchantman or had brought her mainmast tumbling to the deck! Such was a boy's imagination!

Then there was the large pilot flag 23 by 15 feet, bisected vertically into two colors, white and blue. This was bent on to a heavy bamboo pole 25 or more feet long, when not in use kept lashed to the starboard rail. The pole was bent on to the main topmast signal halyards and when hoisted to the extreme limit and guyed as erect as possible the flag added greatly to the boat's visibility.

THE PILOTS

The pilots were often rugged individualists and men of decided opinions, likes and dislikes. Many had first served on deep water Square riggers before entering the pilot service as boatkeepers and in due course receiving their warrants as pilots limited to specified draughts up to 20 ft. and later their full commissions as branch pilots authorized to pilot vessels of any draught of water in and out of Boston.

However, in spite of any personal antipathies, the pilots of each boat were a team, each branch pilot shared equally in the monthly net proceeds, irrespective of whether one had contributed a larger amount of fees earned than had his mates.

By law the schooner required a captain, but the pilots rotated in boarding vessels so that the branch pilot having the first turn usually decided upon the course to pursue and when he left was succeeded by the next in turn, etc.

As the boat securing the inward pilotage was entitled to the outward as well, at times she could not leave for a cruise with her full complement of pilots, as one had to remain in Boston to pilot their outgoing vessels to sea.

The crews at that time were predominantly of foreign origin, mostly of Scandinavian, Dutch and German nationalities. Few of these thought of becoming pilots, they were usually good sailors and content to remain so.

A sprinkling of young men, mostly American, British and from the Maritime Provinces made up the balance of the crews, chaps who for the most part had determined to make piloting their career.

The cooks or stewards were also a mixed lot of foreigners. If he were a good cook, clean, temperate and with an eye to economy, other failings might be overlooked.

But I remember a cook we had on the FRIEND, Charlie Muska he called himself, a Russian or 'Rooshan' in sea parlance. Charlie was a nihilist, or bolshevik as he would be designated at a later day, and possessed a complete arsenal which he kept in his bunk. A .38 calibre repeating rifle, likewise a revolver and a large bowie knife completed his array of lethal weapons.

On calm days he would throw an empty can overboard and then proceed to test his marksmanship with his rifle or revolver. Such goings on finally got on the Skipper's nerves with the result that Charlie's career as steward was brought to an end.

The smaller pilot boats had four bunks in the cabin for the pilots and four in the forecastle for three men and the cook; the larger boats six bunks in the cabin and five or six forrard for the cook and four sailors.

The watches were three, of four hours each, and at night there was only one man on watch at a time, excepting when a boat carried a four man crew, two men kept the middle watch.

However one man could handle the schooner except in very heavy weather, and besides, the pilot on turn was on deck frequently at night.

The crew also had to be reasonably temperate, for when ashore they were subject to call night and day, and it was just too bad if they didn't show up. They couldn't count on much freedom ashore, the boats didn't waste much time at the dock.

I remember one occasion when the FRIEND was manned out (i.e. when all her pilots had been put on incoming vessels) and proceeding to Boston. In the early evening we were up past Fort Independence and all hands were eagerly anticipating a night ashore, when, lo, a tow boat appeared alongside with our pilots on board who were promptly transferred to the FRIEND. Instead of tying up at Lewis Wharf we promptly put about and were off on another cruise.

Next to the pilots the first boatkeeper was the man. He was usually a proper sailor man, knew the harbor thoroughly and was able to act as pilot of a square rigger or steamer, at the captains' insistence due to the exigencies of the situation, and despite the fact that he had no commission and that he was bringing the pilot boat to Boston manned out. I have known this to happen.

He was in command after the last pilot had left and brought the schooner back to Boston. As sometimes the pilot boat was 300 or miles from port when this occurred some knowledge of the use of the sextant came in handy. All in all, the first boatkeeper was mate of the schooner sans title.

When the pilot boat was manned out far off shore and proceeding to Boston, the first boatkeeper did not allow discipline to relax, yet there was a custom observed on the FRIEND, COLUMBIA, VARUNA and I dare say common to the others as well. There was a throwing off somewhat of the restraint on the men forward maintained by the after guard, this was eating at the cabin table! When the cook had set the food in place, he went on deck to relieve the man at the wheel and the whole crew trooped into the cabin and ate their meal with gusto. I don't remember whether the crew ate more than once per day in the hallowed precincts, they couldn't have done it all in stormy weather, besides, the food served in the forecastle was the same as that offered up in the cabin. I suppose it was just a gesture of freedom from the hoary dictum of the sea, the difference between fore and aft.

When on a trip to New York with my father in the spring of 1896 we went to the Erie Basin at Brooklyn to look over the New York and New Jersey pilot boats laid up there for sale because of the change from competitive piloting to a corporation with the substitution of a steel steam vessel for those of wood and sail. There we saw both the JORDAN and the FRIEND, and to my youthful eyes, at least, the best looking pilots of the whole fleet.

My first sea experience was on the EBEN D. JORDAN, so named by my grandfather, an old friend of the great merchant prince, though I have no recollection of the event. It was in the summer of 1883 and I was not yet two years old. But I have an old photo of my father sitting on a camp chair on the deck and holding me on his lap and another of the boat on the port tack, my father standing by the main rigging and holding me in his arms.

This may have been on her trial trip or on the fourth of July, for the boat was flying her pilot flag at the fore and a large white flag displaying her name at the main.

I do have a faint recollection of a later time. There was a mixed party on board and the wind from the northeast had kicked up quite a nasty sea. The wife of one of the pilots was very susceptible to sea sickness and had sought oblivion in her husband's bunk. When the call for lunch came we all had to troop into the

EBEN D. JORDAN

68.81 gross tonnage, 73.2 feet, built in 1883 for Captain Thomas Cooper. Later sold to New pilots. In 1892, she was cut down and sunk by the SAGINAW. She was subsequently refloated and repaired to resume her career in the New York pilot service. Photo by N. L. Stebbins (1883) of Boston. Courtesy of Thomas C. Lampee.

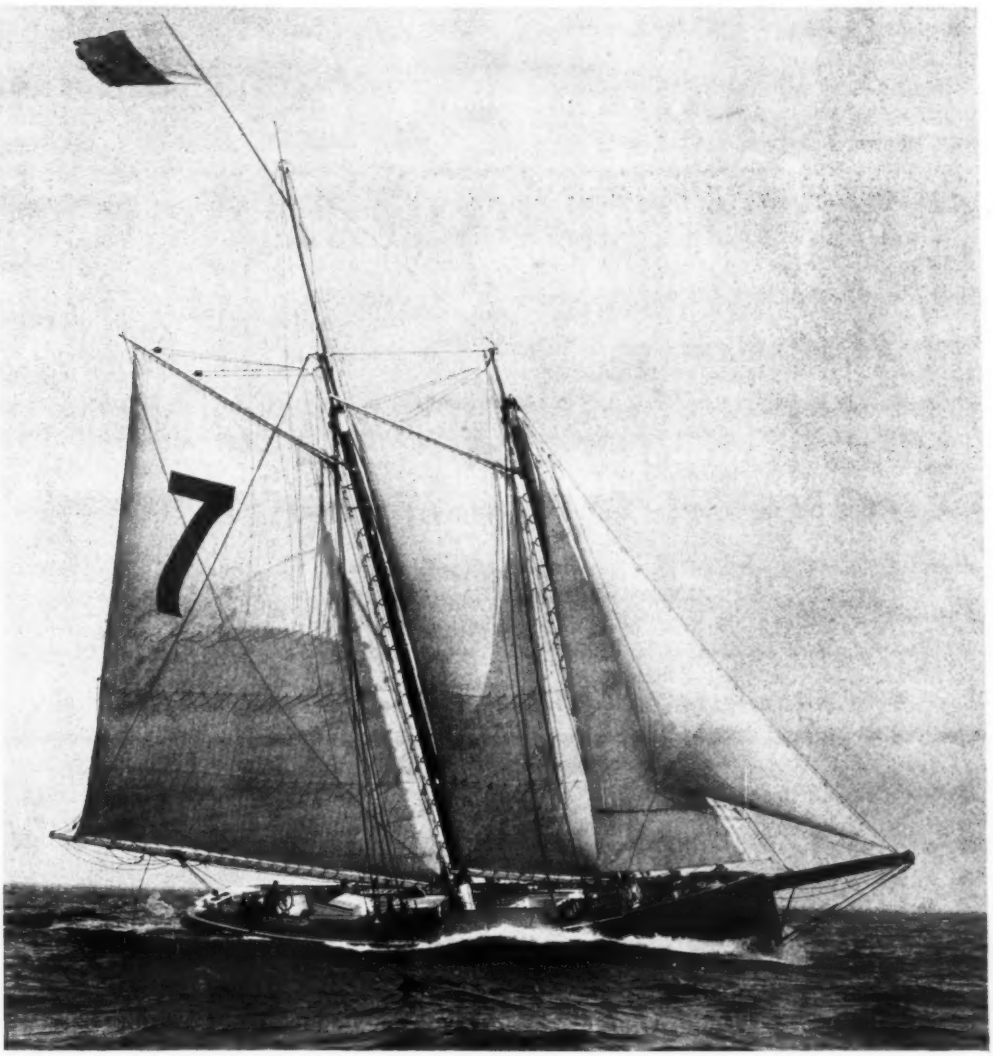
forecastle and eat at the crew's table, for the sight of food in the cabin and the party avidly eating the same would have been just the last straw to the poor woman, deathly sick.

These parties, so called, were quite a common event in those days when the pilots invited their wives, children and friends to enjoy a day's sail while the boat was on the Boston Light station.

My fondest memories of such occasions were of the large cans of ice cream brought on board for the consumption of all and sundry.

FRIEND

The FRIEND, 49.84 gross tons, 67 feet in length, built in 1888 for Captain W. R. Lampee. Photograph by N. L. Stebbins, Boston. Courtesy of C. I. Lampee



The FRIEND was heavily constructed, with deck beams and carlings almost large enough for a ship of the line. She had originally been meant for summer cruising only, by my grandfather and the elderly pilots associated with him, but when Grandfather Thomas Cooper joined her after the sale of the EBEN D. JORDAN she was out in all weathers, both winters and summers, blow high, blow low.

She was very speedy, "a little flyer" as Captain Cooper described her. The standing rigging of hemp was set up with lanyards and deadeyes, though wire rigging and turnbuckles were already in use. The little ship carried a press of canvas including a balloon jib, set in place of the forestaysail and jib when the wind served.

After Capt. Lampee's forced retirement by reason of disability (he later died in Feb. 1892) Capt. Cooper as part owner became Captain and my real cruises on her began in the summer of 1892 and continued through 1893.

No attempt is made to maintain exact chronological order. I simply jot down exciting experiences as they come to mind.

On my first cruise in 1892 we sighted a steamer out in the middle of the bay and in response to our pilot flag she hoisted her union jack at the foremast and lay to awaiting our approach. Here indeed was a throwback to the 1870's. She proved to be the old Cunarder SAMARIA, full brig rigged with clipper bow and bowsprit. Most steamships at that time carried square yards on the foremast but to see a two-masted steamer with both fore and main masts square rigged and with clipper bow and bowsprit was most unusual. Our pilot Mr. Maxwell Reed went on board. She had no canvas set at the time but I do recall seeing the four-masted ROMAN of the Warren Line coming into the bay before a brisk easterly breeze, with her fore topsail and foresale set to take advantage of the favoring wind.

The SAMARIA was in service from 1868 to 1902; registered 2574 gross tons, length 320 feet and was the last Cunarder to be built with clipper bow and bowsprit.

In the following summer we again put a pilot on board of her but this time her yards were stripped from the mainmast, though she continued to carry them on the fore.

On another cruise we were perhaps 150 miles from Boston Light enveloped in a fog so dense that the end of the bowsprit was barely visible. The four masters MICHIGAN of the Warren Line and the VIRGINIAN of the Leyland Line were, according to calculations, due to be met up with at any moment, but because of the thick fog visibility was zero. We never did see the MICHIGAN but a steamer's hoarse whistle sounded ever nearer. We set the pilot flag and fired the gun with startling results. Out of the fog loomed up the yards on the foremast of a steamer, which proved to be the VIRGINIAN, heading directly at us as we lay broadside on. So imminent was the chance of a collision that one of the pilots, somewhat confused, picked me up in his arms prepared to jump overboard with me rather than await the impending crash. A stern command from the Skipper of, "Put that boy down," and with a deft touch of the helm the schooner glided by the steamer's side.

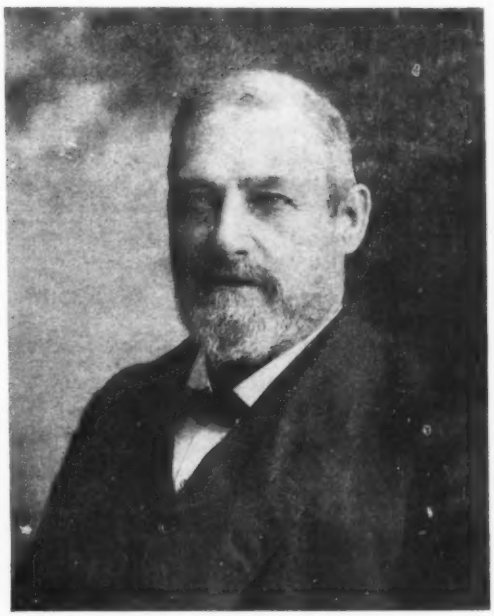
I can still see the startled look on the faces of some of her crew as they looked down over the rail at us before we disappeared from view. Then she was also swallowed up in the fog with nothing to remind us of our close call save the hoarse bellow of her whistle as she lay stopped awaiting our canoe. Out pilot went on board, the canoe returned after some difficulty in locating us, was picked up and all was serene once more.

Perhaps it was on another cruise, I am not certain, that we had put pilots on incoming craft leaving the Skipper the sole remaining pilot on board. His penchant was off-shore cruising, the further off the better. So the boat was headed east by south and was perhaps 150-200 miles from Boston Light when a sail was descried astern heading our way. This was late in the morning and by noon we made her out to be the pilot boat VARUNA, No. 6. The FRIEND with all sail set was no slouch, but neither was the VARUNA. A stern chase is a long chase but No. 6, a larger and more powerful boat was slowly but gradually overhauling us. By the middle of the afternoon we figured that barring a miracle she would overtake us. The miracle happened! The man on the main crosstrees suddenly sung out "A steamer to the norrard!" The glass showed a large steam yacht, painted white, barkentine rigged, bound in. We kept on our course, the BUFFALO of the Wilson Line, a four master with square yards on her foremast, a signal yard on the main, was momentarily expected to heave in sight. Apparently misled by the yacht's rig the VARUNA changed her course and set her huge pilot flag. This was indeed a respite, for not long afterwards the BUFFALO

did come into view, dead ahead and we in turn set our flag, and were gratified when she answered with her jack at the fore. The VARUNA was now far astern to the norrard, her flag still flying,for by this time she must have also made out the BUFFALO. When the steamer stopped her engines ready to pick up our pilot the Skipper then uttered a bit of masterly advice. As he prepared to get into the canoe he said to the boat-keeper, "Joe, I understand the Captain of this ship is supposed to favor the under-dog," pointing to the VARUNA with pilot flag flying. "Now you heave to right across his bow so he won't have a chance to change his mind without running you down." This was accomplished and we never knew whether the BUFFALO's Captain indeed had a yen to change his course or whether it was just a matter of precaution by the Skipper. Anyhow, the BUFFALO was our prize and manned out we headed back to Boston.

The FRIEND was sold to New Jersey pilots in 1893 and the Skipper had built for him and for others the fine pilot boat COLUMBIA, launched in May, 1894.

Deck view, looking forward on port side from amidships.



The Skipper
Captain Thomas Cooper 1833 - 1906

The COLUMBIA was built by Ambrose A. Martin at East Boston. She was 85.5 feet long and measured 88.79 gross tons. In every respect the COLUMBIA was tops and the first pilot boat to be built with a modified spoon bow. She was very fast when off the wind, and I have seen her logging fourteen knots before a strong wind and a choppy sea.

Of course, when she left the builder's hands her deck was in the white, neither oiled nor painted, and for the first summer the Skipper decided to keep it that way. Often when on board I was down on my hands and knees in the forenoon watch with some of the crew, blocks of wood covered with sandpaper in our hands, and we laboriously brought the planks fore and aft to their pristine whiteness. Woe betide any of the crew found with nails in their shoes that would scar that immaculate deck. Of course when fall came the deck was oiled thus putting an end to the sandpaper drudgery.

Among my other tasks was polishing the brass binnacle, the caps on the spokes of the wheel and bitts, the brass bars protecting the skylight windows and the copper sheathing on the jaws of the main boom. It kept me busy. By the way, I have that binnacle at home now, salvaged from the wreck of this fine schooner.

I have mentioned the canoes as offensive equipment. I soon had an opportunity to prove my point. We left Boston on a cruise and just after we were beyond Boston Light a dense fog shut in and the next day the Leyland Liner BOSTONIAN, anchored off the Graves and looking for a pilot was met up with. Then later on we boarded the BRITISH EMPIRE, of the Johnston Line. The third day the wind came up from the westward, the fog vanished, and dead ahead we sighted a Dutch sugar steamer bound in from Java. She was willing so we put a pilot on her also. Astern of her was the Allan Liner PRUSSIAN or "PROOSHAN" in the sailors' lingo. But No. 4, the ADAMS, was close by when we boarded the sugar ship and with a spanking breeze to aid her attempted to cross our bow, but we held our course and as she came perilously close our sails blanketed her and she fell rapidly astern. Then our canoe was launched, the Skipper took his place in the stern, the canoe was towed by the COLUMBIA and we awaited the call to let go. But the order came too soon, for the ADAMS, coming up fast, dropped her canoe abreast of ours then ensued a race under oars that equalled any of the stories of rival whaleboats pulling to be first in on the whale. The steamer lay to with engines stopped, the men in both canoes were pulling their hearts out, exhorted by their respective skippers to row still harder, when a canvas ash chute was lowered on the steamer's starboard side. No. 4's canoe being to port and mistaking this for the boarding ladder kept on for the kill. But the COLUMBIA's skipper saw that the ladder was really being lowered from the port side and as he scrambled up to the steamer's deck the skipper of the ADAMS impotently shook his fist in rage at his discomforture.

This was a mighty short cruise and a lucky one, the schooner manned out in three days not far from Boston Light.

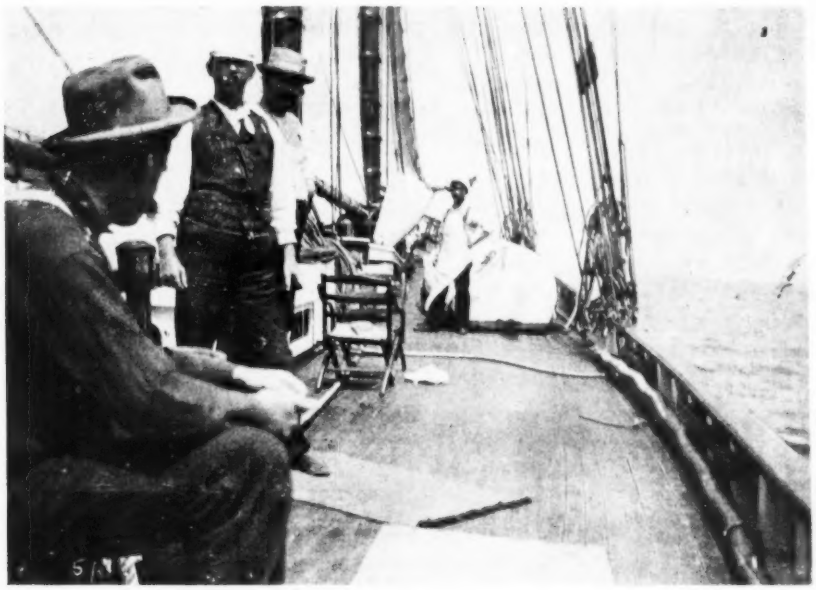
Another cruise, this time on the Cape Cod station: We had hoped to board a banana steamer or two of foreign registry. It was a happy gesture when taking a pilot for these vessels to lower a stem of bananas into the canoe along side. I have seen as many as three stems at one time hanging up in the run to ripen. But no such luck on this cruise.

At this time practically the only foreign vessels requiring pilots were banana boats from Jamaica, steamers with mahogany from Central America, sugar steamers from Cuba, and an occasional square rigger from the far east, South America or round Cape Horn. Steamers from European ports, unless somewhat out of their course were rarely boarded by boats on the Cape Cod station, most of them were snapped up by pilots boats lying outside the limits beyond which the station boat was not supposed to venture, and if caught in the act by a competitor would be reported to the Pilot Commissioners and the pilotage claimed and awarded.

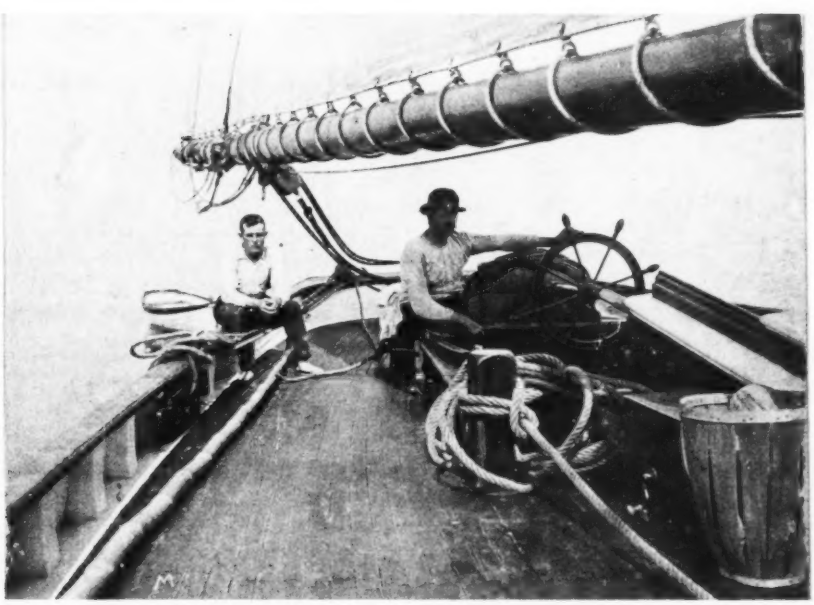
The Cape Cod Station was defined as follows: "Inside the line Race Point bearing south and Highland light bearing west northwest." These were the limits prescribed for the station boat, but nothing to my knowledge prevented other boats from poaching on this territory. The Cape Station was established in 1873 after the loss of the ship PERUVIAN. The Skipper had "carrier her to sea," to use his own words, on her last outward voyage. Returning she was lost on Cape Cod in a heavy gale and a blinding snowstorm. A quarter board bearing the name PERUVIAN was washed up on the beach, but for that nothing would have been known of her fate, - her crew of 23 men perished. The pilots then voluntarily offered, in consultation with the merchants and insurance men of Boston, to put a boat there until the whole details could be regulated by statute.

The last day of our station duty a flat calm prevailed that presaged a later change of wind, and we made out a square rigged vessel also nearly motionless, sails flapping for lack of a breeze.

Deck views of the COLUMBIA



Starboard side looking forward. Canoe on deck secured by gripe, and note portion of bamboo flag pole lashed against starboard rail. Photo provided by the author.



Looking aft on the starboard side. Upper portion of bamboo flag pole at rail. Peter at the wheel and Eddie Patterson seated on rail. Both boatkeepers were lost in the wreck of the COLUMBIA.

The two vessels gradually drew nearer and we were eventually alongside of a beautiful little hermaphrodite brig hardly longer than the COLUMBIA. She proved to be the WATER WITCH, painted white, of American Registry and bound from a southern port to Boston with a load of coal.

To our hail, "Want a pilot," her skipper replied emphatically, "Naw, I don't want no pilot," and that was that; she was not liable for pilotage and he knew it.

Later on a breeze replaced the calm and our station duty over we headed for Boston. During the night a summer northeaster with a lumpy sea had sprung up and in the morning again the WATER WITCH, under two topsails, fore staysail and double reefed mainsail, her jack flying at the fore! She hove to and our pilot went on board. Here was a skipper who understandingly did not wish to pay pilotage fees when conditions were favorable but when a change for the worse occurred decided that a pilot on board was not so bad after all. And to their everlasting credit, Boston pilots never failed, when humanly possible, in their duty to board vessels requiring their services.

My last cruise on the COLUMBIA, the most exciting one of all. It was the 3rd or 4th of April, 1898, and as it was spring vacation time the Skipper had no qualms that the trip would interfere with school attendance.

When we passed Boston Light the patent log was thrown over the stern and the course was set east by south before a brisk norwesterly wind. The first few days were cold with frequent snow squalls, then the weather moderated and we lay hove to on Brown's Bank, some three hundred miles from Boston. On Saturday we sent up the fore topmast and on Easter Day, April 10, at four o'clock in the morning we were awakened by the man on watch singing out, "Smoke-O". The sun had not yet risen and the steamer was barely discernable to the southard heading across our bow. Rockets and blue lights were burned, the gun was fired and the pilot flag set, the steamer sheered for us with the union jack set and the pilot Mr. John Fawcett, was rowed to the steamer and went on board. This vessel was the Warren liner NORSEMAN the first inbound steamer we had seen since our departure from Boston.

We were again hove to and the sun had risen on one of the most beautiful and peaceful mornings you could ever wish to see. The breeze grew lighter and lighter, the air balmy and towards noon a haze sprung up in the south and west and out of the obscurity in the west came a full rigged ship and right above her in the air there seemed to be another. This, of course, was a mirage. The haze disappeared, the ship with all sails set came nearer and proved to be the Nova Scotia ship CALDERA bound for Rio loaded with lumber, including a deck load. She was in Boston when we sailed. The CALDERA was in sight all the afternoon, fanning along before the faint westerly breeze.

Monday came with a change in weather. The wind had swung to the eastward, the sun shone but the whole aspect had an angry look, the wind increasing as the day wore on. In the morning we had sighted a Leyland liner bound in, away off to the southard, but she did not sheer in reply to our signals. Before sunset the wind and sea had increased considerably. We had been fleeting in all day, the boat was hauled to, a reef put in the mainsail and the jib stowed.

The next day more of the same, a cold rain had set in, the wind and sea had risen yet higher and it was evident that we were in for a spell of dirty weather, which called for another reef in the mainsail. On Wednesday we were in a real gale of wind and when I staggered up on the deck, seasick as a dog, I found the COLUMBIA under the shortest canvas I had ever seen on a pilot boat. The mainsail had been furled and in its place was set a main trysail, the foresail was double reefed, and a reef was taken in the fore staysail. The wind was howling, the rain pouring down, and right abreast of us the Warren liner OTTOMAN awaiting our pilot. Capt. William Abbott dexterously jumped into the canoe which made its way perilously to the steamer. It was an awe inspiring sight to watch, at one moment the canoe high on the crest of a wave then plunging down into

the trough, out of sight until she rose up once more on the succeeding surge. The canoe eventually returned, was picked up and I staggered back to the solace of my bunk. Real seasickness is a peculiar affliction. While lying prone on your back you are in the seventh heaven. Once on your feet you are in the lowest circle of hell. While in my bunk listening to the seas breaking on board I did not seem to care whether the vessel sank or remained afloat. When she rode upward on a huge sea and then paused on the summit before descending swiftly into the hollow, every timber seemed to tremble though she was only four years old and most stoutly built.

Thursday saw the culmination of the storm, on that night Charlie, an English cockney, was tossed out of his bunk and landed flat on his back on the forecastle floor, and in the cabin a large chart mounted on heavy board shot from a spare bunk and brought up against the gimbals of the cabin lamp. On Friday the wind had let down and by nightfall had slackened to a slight breeze though the seas continued to run high.

In the early evening we sighted a steamer's masthead light, we burned a blue light and in response she burned an answering one indicating a pilot was wanted. Now with the falling wind and the heavy seas still running it was necessary to get more way upon the schooner, so the trysail was unbent and a reef shaken out of the mainsail and the sail hosted. All hands and the cook were now fully occupied. A man on the sheerpole of the main rigging holding a burning bluelight, others hoisting the mainsail, the pilot preparing to go in the canoe and then with the canoe launched and two boatkeepers taking their places on the thwarts left us fairly shorthanded so I was commandeered to take the wheel and keep her along. The glare from the bluelight cast an eerie green aspect over the waves which reared up with their crests breaking into foam and occasionally slopping over the windward rail on to the deck. And of the canoe pulling toward the steamer we saw nothing save a glimpse of her canoe light when she rose up on a wave and then disappeared, it seemed, for eternity, until the light shone forth again as she mounted the following surge.

The pilot, Mr. Ohlson, went on board the vessel which proved to be a Dutch steamer from Batavia with a cargo of sugar. We were now between Cape Cod and Cape Ann and on Saturday morning with the wind from the westward and clearing rapidly we started east again and on Sunday were about one hundred and fifty miles from Boston Light. In the morning we sighted the smoke of a steamer bound in, and in due course after our flag was hoisted, she set her jack for a pilot.

She was the Cunarder SCYTHIA used as a spare ship for her larger contemporaries, the PAVONIA, CATALONIA and CEPHALONIA which were being successively overhauled and refurbished for the coming season.

Spring vacation was nearly over and as the Skipper was fearful I would miss a day's schooling I was ordered to go home with him on the SCYTHIA. With some trepidation I got into the canoe and this increased when we got alongside the SCYTHIA. A considerable swell from the past storm was still running and it was necessary to stand on a thwart of the canoe and jump for the boarding ladder when it rose to the swell. This I accomplished followed by the Skipper but when I looked down on the canoe many feet below as she dropped on the receding wave I was glad to resume my climb upward. The boarding ladder was a rope ladder fitted with wooden steps 3-4 inches wide and hung from the ship's rail. As we came over the side the few cabin passengers rushed to meet us, crying out, "Has war been declared?" "What war," we answered, and then it dawned on us that our relations with Spain were very strained. The Skipper produced a bundle of the latest newspapers dated the day we left Boston but these did not aid. The SCYTHIA had left Liverpool the same day we had sailed, had spoken or signalled no vessel since and had been through the same gale of wind, though worse, making only at one time forty-eight miles in 24 hours.

Of course, wireless had not come into use so we were all as much in the dark as ever.

But to show that war with Spain was imminent we arrived at Boston on April 18 and on May 2nd, Dewey steamed into Manila Bay and smashed the Spanish fleet. What a contrast to 1914. In 1898 with previous warning we might have been picked off by a Spanish cruiser, but when the German KRONPRINCESSIN CECILE sailed from New York to Hamburg in August of 1914 with a large consignment of gold she received a wireless message in mid-ocean from the German Government that war had been declared against England and was ordered to return to the United States! This she did arriving finally at Bar Harbor, Maine.

The SCYTHIA had less than 15 cabin passengers, but 1000 immigrants in the steerage, mostly from Ireland. We arrived too late for quarantine, so anchored for the night outside of Boston Light, and on Monday morning up anchored and proceeded Boston.

The COLUMBIA met her fate in the Portland Gale, Nov. 26 and 27. At noon of the 26th she put Capt. William Abbott on board of the Allan Line steamer HIBERNIAN off Race Point, as I have always understood, and proceeded to Boston manned out. It was nearly a flat calm and her progress was slow. It was reported that she was seen by the light-ship just before dusk set in. The gale which was revolving, a true hurricane, struck suddenly with blinding snow. The COLUMBIA could not make the harbor and put about to stand out to sea but she was on a lee shore. The boatkeeper finding that he could not fetch by the land furled all sails and let go both anchors. The anchors did not hold, she drove up on a ledge off Scituate and stove in her port side, allowing her water tank and ballast to go overboard. Then she rose up on an enormous sea and drove ashore on the Sand Hills, knocking a cottage down on her deck. It she had not been so stoutly built she would never have lasted to make the beach. The Skipper, who had stayed ashore, due to the untimely death of my father a few days earlier, did not feel undue concern until the Monday morning papers announced her wreck.

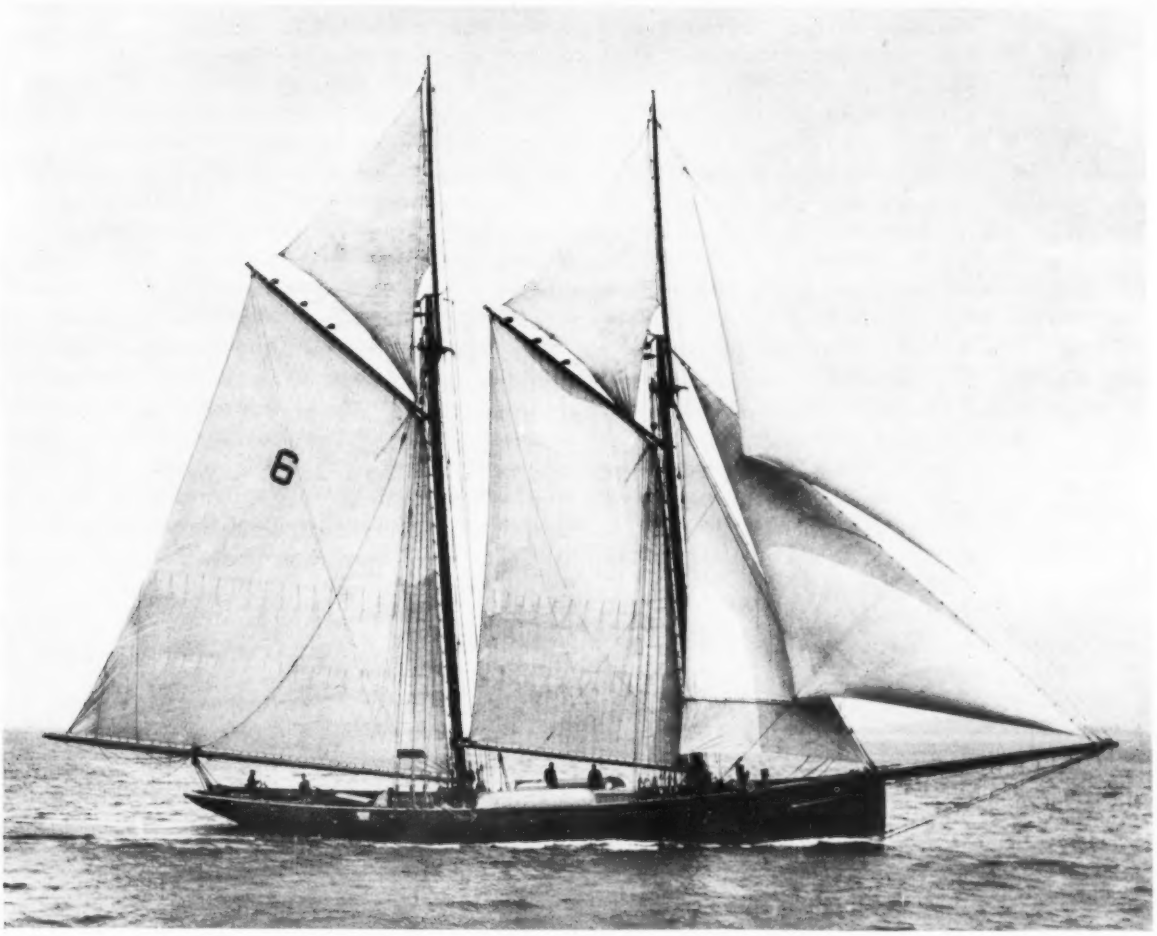
On Wednesday, the first day that the railroad line was open we went to Scituate accompanied by a marine junk dealer. When we saw the wreck her starboard side seemed OK outside of the loss of her rudder, the lower end of her stern post shredded, some sheets of copper missing and her masts broken off close to the deck with the sails securely furled to the booms. But her port side resting on the sands was mostly open and the Skipper, realizing that she could not be salvaged sold her as she lay for $300. She had cost over $12,000 to build. Inside she was a mess, all bulkheads and bunks gone and the hull gutted from stem to stern, filled with broken crockery, sodden newspapers, books, mattresses and every conceivable article of a ship's furnishings.

Her two anchor chains were streamed out to the bitter ends, the chains had not parted but the shackle pins which had secured the anchors to the chains had let go - under the tremendous force of the sea. All five men of her crew were drowned, two of the bodies never recovered. The Skipper naturally was distressed over her loss, but more by the loss of the men, some of whom had served with him for years. He was never the same after this catastrophe.

The Skipper found no fault with the way the COLUMBIA was handled in this storm. His first boatkeeper, Harry Peterson he called himself (though not his real name), a Norwegian, had been with my grandfather for years, had long seafaring experience, he was a proper sailor man. Grandfather said that under the prevailing conditions everything possible had been done to save the vessel.

After the loss of the COLUMBIA Capt. Cooper transferred to the VARNUNA of which he was a part owner. He was no longer Captain, but served as just another pilot on board.

My last cruise was rather an anti-climax. The Skipper asked me to sail once again, and early in April 1900, we set out from Boston on a cruise to the eastward. It was my senior year in High School.



VARUNA

90.61 Gross tons, 87.9 feet long, 23.3 feet breadth, 9.7 feet depth, built in Chelsea, Massachusetts, by Montgomery & Howard, originally equipped with a center board, afterwards its use was discarded... Photograph by N. L. Stebbins, from the collection of Charles I. Lampee

-0-0-

This trip was very hum-drum. True, there were cold westerly winds with snow squalls, it seemed the sun never shone; cloudy, but no change in the wind's direction. One after another, the pilots left on inbound steamers, leaving only the Skipper, as I always call him, awaiting his turn. He always did have an inclination for the last turn, often exchanging places with some pilot who rightfully should have been the last to go.

I liked to talk with the first boatkeeper of his experiences on the VARUNA during the terrible "Portland Gale" that sealed the fate of the COLUMBIA. The VARUNA was bound out on a cruise when the gale struck and was much further off shore. As it was, she just barely pulled by the Highlands of Cape Cod. After rejecting the opinion of one pilot that they try to make Plymouth Harbor, (certain destruction in stress of wind and blinding snow) it was wisely decided

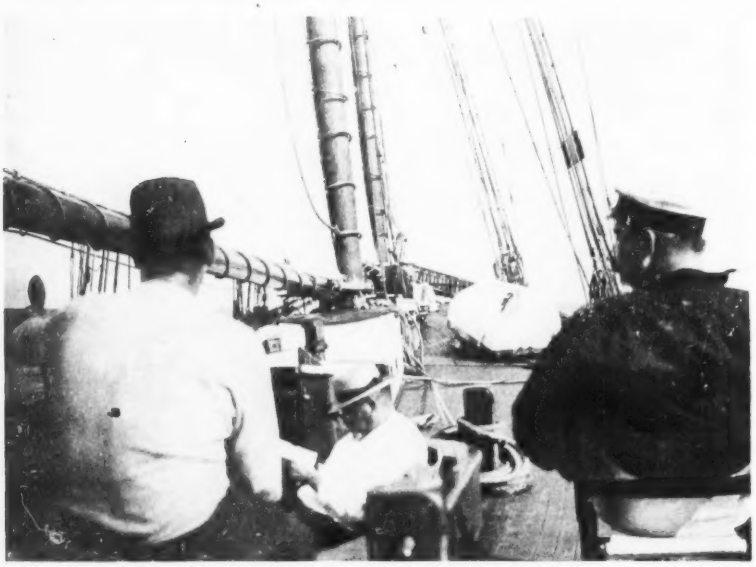
to keep on and try to slide by the bend of the Cape. The boatkeeper said that as she passed by Peaked Hill Bars the enormous seas were throwing the sand scooped up from the bottom all over her deck. And as he was standing on the sheerpole of the lee main rigging attending to something that had gone adrift a terrific sea rolled her over and buried him up to his neck. However, she survived, with considerable damage to her deck fittings and after repairs were made resumed her duties in the pilot fleet.

About 200 or more miles out, a steamer was sighted bound in and responded to our flag by setting her jack. The Skipper went on board and by some cajolery or other, induced her captain to take our hawser which we gleefully made fast. As the wind was light and contrary we would have been some time under sail before reaching Boston, but in tow we would certainly arrive home as fast as the steamer did. She proved to be a foreigner, either English or Scandinavian, I forget which, bound from a Nova Scotia port to Boston with a load of coal.

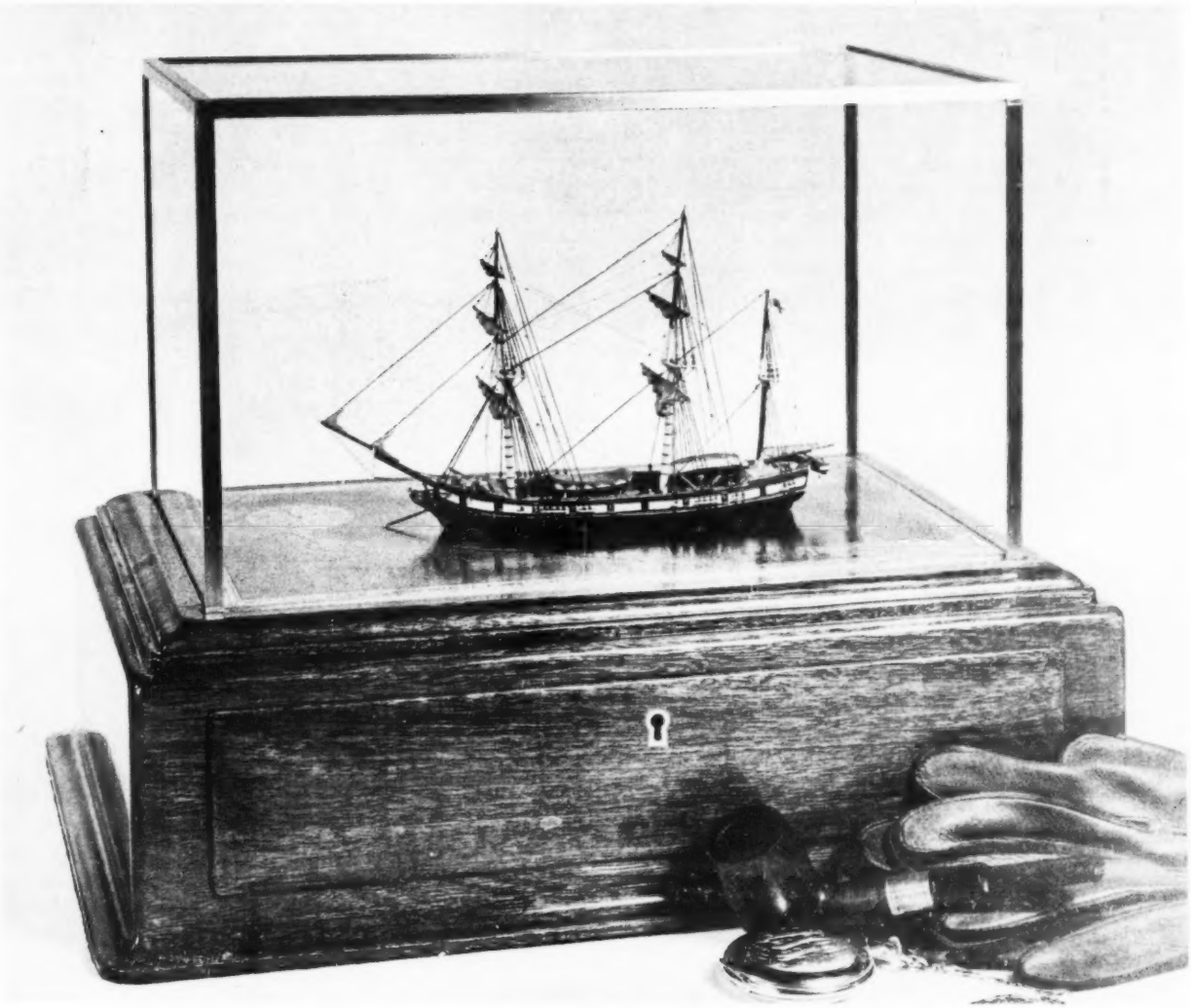
This was the life, nothing to do except for a man at the wheel and others forward to see that all went well with the tow line. The crew, following the time honored custom when manned out, ate at the cabin table, and all in all we had a good time, no bad weather, the sea smooth, so we arrived at Boston Light, hauled in the towing hawser and made our way up to our dock at Boston, our cruise ended.

This was my last cruise, after 1900 I never stepped foot on a pilot boat again. For the short period of the Spanish-American war the pilots gave up the competitive system but returned to it after hostilities were over and resumed the time-honored way in which they had conducted the business of piloting. But when the pilots finally adopted their new form of organization, doing away with the competitive system it seemed to my youthful mind that all the romance and rivalry had departed and I lost interest.

I forgot that while conditions under the cooperative system were in some respects less arduous, the same wintry gales and dangers prevail as they had in former days, testing the skill and courage of those who have devoted their lives to the preservation of the shipping, seeking to come safely into Boston Harbor. This, I know, is a desultory and rambling account, a man of 77 years can be forgetful, but it does have the merit of being an entirely truthful narrative of the scenes and incidents I witnessed so many years ago.



Deckview of the COLUMBIA showing the Skipper reading in a quiet period. Canoe is shown lashed down amidships.



H. M. S. BEAGLE
By A. G. Law, 1958

From detailed drawings and descriptions very kindly furnished me by the British Admiralty Library and the National Maritime Museum, London, England.

The Beagle, originally built as a brig of ten guns, was later transferred to cartographic service and her sail plan was changed by the addition of a third mast.

In December of 1831, under the command of Captail Robert Fitz Roy, the Beagle sailed on her assigned mission to make a chain of chronometrical measurements around the world.

Charles Darwin was invited to make the voyage as Naturalist. At that time Darwin was but 23 years of age, but his zeal for the work, his extensive studies and his abundant notes, made during the five years of the voyage, were the basis for his final theory of evolution. Darwin's "Journal of Researches" was published in 1855 by Harper & Brothers, New York. It is in two volumes and both are housed in the velvet lined drawer of the cabinet base.

The miniature replica of the Beagle is mounted upon a hand-drawn water color map showing the vessel anchored in the Rio Plata, off the city of "Buenos Ayres," in July of 1832. The little ship measures just five inches in length at the water-line. The cabinet base is a natural finish solid mahogany, with satin finished brass binding around the glass dust case.

"DUTCHESS", French Galley of Louis XIV
(circa 1690)
Built by August F. Crabtree

Photograph reproduced with special permission of A. F. Crabtree

RAISING OF THE SWEDISH MAN-OF-WAR "VASA"
As accomplished to September 20, 1958

By Commodore E. Clason, Chairman
of the VASA Committee

Report furnished through J. C. Ferguson

The VASA was built in the Naval Dockyard in Stockholm and finished in the summer of 1628. On the 10th of August she lay at the Royal Palace where she had taken onboard her guns, munitions, provisions and so on. It was intended that she should join the fleet in Stockholm Archipelago, fully equipped for war.

Sweden was at that time at war with Poland, and one squadron - about half of the Navy - was blockading the Polish coast. The rest was kept in preparedness in the outer parts of Stockholm Archipelago. Moreover, the King and the Council had already resolved to join in the great Thirty Years War, then raging in Germany. The utomost was therefore done to prepare the country for war.

In the afternoon of August 10th the VASA was warped out from her mooring berth, made sails and got under way on an easterly course. She only carried her topsails and mizzen. The wind was light, southwesterly. When she came out of the lee of the high rocks, which form the southern coast of Stockholm Harbour, she all of a sudden heeled over, capsized and sank in 18 fathoms of water. We don't know exactly how many of her complement were drowned: It is said to have been between 30 and 50.

The VASA was a three-decked ship of about 170 feet length and a beam of just over 40 feet. Her draught was about 15 feet. She carried 64 guns: Her main armament consisted of 48 - 24 pdrs of bronze in two batteries, 22 guns in the upper battery, 26 in the lower. It is of interest that, of these 48 24 pdrs, 46 were cast for VASA, but the other two were older ones. The remaining 16 guns were lighter guns, probably placed on the upper deck and on the poop and the forecastle.

Her crew is supposed to have been about 450 men. How many of these were onboard on the actual day is unknown, but we know that a number - about 30 or 40 - relatives were allowed to accompany the ship out in the archipelago.

Why did the VASA capsize? Of course there were extensive inquiries held immediately after the disaster and there is no doubt that VASA was very unstable.

If we look at her dimensions we find that her length was about four times her beam, but in our previous ships - and in those built after the VASA disaster too - the length was 3.3 - 3.5 times the beam. In 1704 there was built a Swedish ship with about the same length and beam as VASA but 4 feet greater draught and correspondingly greater ballast.

So the VASA was either too narrow for her armament and length or - if you accept the narrowness - of too small draught to give enough ballast capacity. She probably represented an attempt to get a faster, more heavily armed ship. But even if her shape was a failure, her structure and constructional details are of immense interest as we know very little about the ships of those days.

During the years following the disaster, many attempts were made to raise the VASA, but without success. Some thirty years later, in 1664, a Swede named von Treileben did a most remarkable feat. Using a diving bell he succeeded in taking out and salvaging most of the guns. The divers must have worked in practically pitch darkness, as the Maelar lake, which has its outlet through Stockholm, has a very brownish water. The only possibility to renew the air in

the diving bell must have been by sending down casks with air (this occasion seems, by the way, to be the first time this method is mentioned).

From the later part of the 17th century, the VASA seems more or less to have disappeared from the memory of men, although there is some mention of her in books dealing with the navy of Gustavus Adolphus.

In 1920 some unidentified guns were found in the archipelago and raised. When scrutinized the old documents to find out what guns they were, an eminent Swedish historian, professor Ahnlund, also found some reports about the VASA-disaster and published them.

Mr. Anders Franzén of Stockholm, who for some years has specialized in locating old naval wrecks, took up the VASA-trail the other year and through painstaking research in the archives and systematic soundings in Stockholm waters, he succeeded in 1956 in locating what was most probably a big hull, built of old oak. Divers were down and they found an old man-of-war lying on the bottom, silted down up to the lower battery gunports but still standing some 15 - 20 feet out of the mud.

The authorities considered that this was something great and a special committee was formed to investigate whether it could be the VASA and if it would be possible to raise her. The committee, of which I had the honour to be chairman, consisted of naval officers, archeologists, experts in preservation, salvage specialists and so on. To assist us with diving operations the training courses for the naval divers were placed at the disposal of the Naval Dockyard, Stockholm.

The committee found that the ship most probably was the VASA: The place of the disaster, the general appearance of the ship, the dimensions, the number of gunports - everything fitted. If there had been any doubts they were finally removed on September 5th, 1958, when we raised a 24 pdr bronze gun with the crest of the VASA-dynasty. The letters G A R S - Gustavus Adolphus Rex Sueciae - and the year 162.. (the last number is impossible to read) showing, that it was one of the 46 guns manufactured for the VASA.

The keel of VASA - about 2 feet broad - is at a depth of about 20 fathoms. The ship has settled down 7 - 10 feet in a stiff clay. Above the clay there is about the same thickness of mud and slime. These we can suck away and the clay is easily cut by a water-jet. Tunnels cut in the clay are lasting very well. Between the mud and the clay we find lots of objects belonging to the ship.

The VASA was built of oak, but in bulwarks and superstructures we have found some fir planks.

The hull is carvel-built with oak planks about a foot wide and 3 - 4" thick. Ribs and beams seem to be 10 inches or a foot square.

The sides are strengthened by a system of longitudinal ribbands or wales about 4 inches thicker than the ordinary planks. There are nine such wales on each side: Three above upper battery gunports, two between upper and lower battery and four beneath lower battery gun ports.

Most of the joints are made by wooden pegs which are in a very good condition. In some places they were reinforced by iron bolts or nails, but these are mostly rusted away.

The bulwarks and superstructures were clinker-built. They, and the rigging are practically all gone, broken down during the years. The hull proper is practically

intact, although the upper decks were broken up when they took out the guns in 1664. So far we have found very little damage to the hull. It's amazing in what good condition she is as we have already found some 15 anchors of different ages which have been fouled in the VASA and lost.

The oak in itself is fairly good: The tensile strength of a piece of oak showed to be about 60% of the strength of fresh oak. As there are no teredos in the Baltic the wood is intact from gnawing or boring worms.

The committee believes that the ship will stand raising, but we can't be sure of that until we have tried, so we have recommended that she should be raised and moved - still submerged - into shallower water where she will be more accessible for examination and reinforcing prior to the final raising.

The water in the harbour of Stockholm is very muddy. With a lamp the diver sometimes can see up to 3 or 4 yards but normally not more than 1 - 2 yards, and when he starts working the silt is disturbed he cannot see anything at all. Because of that our first job was to nail a sort of a yard-measure along the sides to give the divers a reference system for their observations, and so, with a great number of divings and lots of reports from the divers, we have made a rough sketch of the VASA which we believe is - for the time being - passably correct but definitely wrong in lots of details.

We intend to have six tunnels under her: So far two are ready (number 2 and 4) and we are just going to start work at the stern, where we intend to have the sixth tunnel. The work proceeds slowly: VASA lies just outside our main drydock, and everytime a ship should be taken into or out of the dock we have to break off our diving operations and remove our pontoons and barges. Further: All the mud sucked up must be strained for small items, all loose pieces must be taken up, cleaned and preserved. In the middle of September, 1958, we had made more than 800 descents and taken up about 160 different articles. These comprise of a number of parts of gun port lids, bulwark stanchions, bulwark planks, deck planks and so on. We have also got a beautifully carved head-rail - still with traces of gold - from the beakhead and some other carvings. Last year we found a very beautiful lion's face, carved in alder. Size about 20 x 16 x 8 inches. There were traces of gold or yellow paint on it, and its tongue and mouth still showed the red paint they had got 330 years ago. Fangs and eyeballs have been white. This year we have found seven or eight more in different states of preservation and we have also been able to ascertain that they were placed on the inside of the red painted gun ports lids. When the ship was ready for action a yellow lion's face frowned with bared fangs above each gun. This was an element of decoration of our warships that wasn't known before.

So far we have done very little work within the ship: We intend to save that until we have her in shallow water, where it is easier to do the excavation with due caution. Our plans? So far everything is done as training for our divers but we have asked the government for a grant of 135 000 Sw. kr (between $25,000 - $30,000) to enable us to raise the ship and place her, still submerged, in shallower water. (That we can do it as cheaply as that depends on the benevolent cooperation of a number of Swedish firms: For example Trelleborg Rubber Company has lent us our sucking hoses, Atlas Copco the necessary air compressor, Fagersta Steelworks has promised to assist us with personnel and material for the actual raising).

When after that first step we know if (or that) the VASA can be salved we shall apply for further funds, necessary for the completion of the work: Grants from the government, donations, contributions and so on. For the whole project, including not only the final raising, preservation and reconstruction but also the building of a museum for the VASA, we esteem that we will need about 6 million Sw. kr ($1,200,000). It will take years and years before the work is completed, but we hope we can go through with it, so we can show the world what a ship-of-the-line from 1628 looks like.

SOME COMMENTS ON THE COLORS OF SHIPS

By Winthrop Pratt, Jr.

Mr. Kostalik's recent article on the colors of ships is well founded and shows considerable thought and research. It is certainly high time that this subject should be treated upon, for, as the author states, it is a complex business.

However, as I feel that some of the statements made could perhaps become misleading, I should like to submit a few supplementary observations.

First, the period covered, from the 1500's to the mid 1800's is a long time, during which colors and fashions in color were changing, and each nation had ideas of its own. Also, there was considerable difference between the color schemes of war ships and others.

Certainly the basic colors have always been red, yellow, white and black, but I would add one other - green - to this list, as it has been a principal, and not infrequently dominant, color through the years.

Let's discuss these colors one at a time.

Black, as Mr. Kostalik states, was the soot of burnt bones. True enough, but not the only black in use. Lamp black, tar, and pitch were also used. The technical difference between tar and pitch is complex and seems to have varied through the ages. It is perhaps the oldest form of black used on ships, and should be just a bit on the brownish side, and not of the cold, grayish cast of lamp black. This tar or pitch (the words sometimes used interchangeably) may have been asphaltum or vegetable. In colonial America, and doubtless elsewhere, it was sometimes made by burning pine tree limbs and knots in a tar pit.

White lead, an old color, was according to Pliny, made by the Romans as early as 430 B.C. Zinc white, a later color, was used on ships, and the so-called "lime white," made by burning clam or oyster shells. Another white was made of whiting or chalk, and oil - to the gain of the contractor, and attendant loss of the owner!

Yellow, often made from natural deposits of clay, was the basis for the yellow ochre, and the shade would vary according to the source of material - sometimes dirty brownish, sometimes strong, sometimes weak. There were also other yellows, one of which in Pliny's time was an oxide of lead (of ancient usage).

Red, made by heating natural yellow clay, produced a "brick" color of varying intensity sometimes (in America) called Indian red. The term "brick red" incidentally, is too indefinite, as a close scrutiny of any brickwork will prove.

Some of the colors available to the shipbuilder from early times to the 19th century were as follows:

1. Pliny, who lived from A.D. 23 to 69, speaking of the early Greek ships, lists seven kinds of encaustic paints, that is, colors melted into wax and put on with a brush. Purple, violet, blue, yellow, green, and two whites. Also a paint intended to match the color of the waves, and used on vessels employed in reconnoitering (or in piracy) as a camouflage. Earliest Greek ships were tarred black with patches of blue, purple, or vermillion on the bows. The Illiad most frequently refers to the "long black ships."

2. Roman warships, CA. A. D. 50, had small turrets on the bows painted so as to distinguish one ship from another.

3. Pliny's own time: Cerusa (white lead), white made from chalk, and from gypsum. Black chalk, charcoal, lamp black, bone black. "Blue ashes" (carbonate of copper), indigo, Egyptian blue. Red lead, red ochre, cinnabar, dragon's blood, lakes (from madder). Yellow ochre, yellow acetate of lead, orpiment (yellow), and vegetable pigments. Green earth, malachite, verdigris, and vegetable pigments.

4. 1220: Lakes mentioned.

5. 13th and 14th centuries: Real ultramarine used.

6. 15th century; 1st use of Naples yellow, also two other yellows.

7. 1584: Discovery of smalt, a deep blue, which became pale and grayish on exposure to moisture after a time.

8. Elizabethan Period: Cerusa (white lead), lime white made from bones, and from oyster shells, and white made from eggshells. Charcoal black (from willow), ivory black (burnt ivory), and a black from burnt peach or cherry stones. Reds (called Murreys) were Venice and Antwerp lake, Indian lake, Vermillion, red lead, and a red called "pincke." Blue bice (carbonate of copper), ultramarine, smalt (a vitreous mixture containing cobalt and silicate of potash), and indigo (a vegetable color made in England from woad the plant and also imported). Yellows included masticot (the oxide of lead of Pliny's time, probably made by heating white lead), yellow ochre (found in England, and imported from France and Spain), a yellow made from buckthorn or from alder berries (very fugitive), and gamboge (an intense yellow) also known.

Green verditer, sap or vegetable green, green bice, malachite, and verdigris.

Brown ochre, spalt or spaltum (perhaps same as Antwerp brown; an asphalt or mineral pitch derivative), Cologne earth of "Cullen Earth" (sometimes called Cassel earth - a species of brown coal - today's Vandyke brown), Seacole (soot, today's Bistre), burnt umber (found in England), Levant umber (imported), raw sienna, burnt sienna, and a brown made by adding brown ochre to white lead. Russet also popular, and purple not infrequent on large vessels; also aneral (ashen color).

9. 1649: Cochineal lake discovered.

10. 18th Century: Venetian red, Naples yellow, and (after 1704) Prussian blue were in use. By 1738 Spanish white, Spanish brown, Spruce yellow, Terraumber, and Carmine were being sold in New England, and in 1761, Drop lake, Rose pink, Kings yellow, Stone Yellow, Orpiment (pale, and deep), Dutch pink, Brown pink, Blue Verditer, Powder blue, Frankfurt black, and Blue-black were added. Three years later, 1764, New England papers advertised thirty-four different colors.

11. 19th Century: At this time Viridian (a green), Chrome yellow, and Cadmium yellow were added.

As we have seen the vehicle of Grecian times was wax, but various oils and turpentine are of ancient usage. I think the statement that there were no petroleum solvents in early times is confusing, especially when coupled with the statement that the "thinner" used was rum. True, rum was used on occasion, but by no means universally, and turpentine, together with various fish oils, linseed oils both raw and boiled) and nut oil, were quite usual - certainly during the period

covered by Mr. Kostalik. There were also (at least from the early 18th century) white and brown hard varnish, and common varnish.

Gold and silver leaf were extensively used on capital ships to such an extent that in the late 17th century the British Admiralty ordered the substitution of "gold color," undoubtedly a mixture of one of the yellows and perhaps a varnish. Leaf brass, bronze, and Dutch metal also came into use early in the 1800's.

As has been mentioned, there was great variety of fashion in painting ships, much of which is yet unknown. It is believed that some of the Viking ships were painted in stripes, coinciding with the planks as were those of William the Conqueror in 1066 on which combinations of blue, yellow, green, and red were alternate. By the time of Henry IV (1399-1413), red appears to have been in favor at least for the King's ships, with or without some gold leaf, although a few were all black. This applies to the upper works or friezing, the sides probably being "bright," that is, payed with "stuff," a combination of rosin and turpentine (the "turpentine sides" or "timber color" of other years). Henry VII's ships (1485-1509) employed color to considerable extent also, including vermillion, fine gold, russet, bice, red lead, white lead, brown, Spanish white, verdigris, and aneral, according to Carr-Laughton. Yellow ochre, crimson lake, and varnish were also used during the 16th century.

It is well to note here that bright sides with multi-colored friezes and upper works are dominant, and that green and white (the Tudor colors) were prominent after the mid-16th century in English ships. During Elizabeth's reign there was no truly uniform system, some vessels being timber color, some all red, or all white, and others black and white or green and white. These colors apply generally to the frieze, but there were such examples as the White Bear which was all red. Toward the end of the century, when carved work was supplanting painted decoration, green was still a prominent color, but after the Prince Royal of 1610, it was not popular in the King's ships, except for its brief return as an inboard color between 1815 and 1830.

The use of black sides with a yellow port stripe appears to have started early in the 18th century, a practice which continued until about the time of the American Revolution with few exceptions, although some vessels had bright sides from about mid-century. About 1780 a few ships used a red port stripe instead of yellow. The yellow used, by the way, varied considerably in tone and intensity, but black sides with white port stripes was the rule after about 1815 up to the end of the sailing man-of-war, for English ships.

A word about the ship's bottom. Without going into too much detail, it can be said that some form of tar or pitch was applied in very ancient times, and was in continual use, on certain vessels, until the mid-19th century. Greek and Roman craft used it, as did the Vikings and the early clinker-built vessels of Northern Europe. It was even used on the Ark! Lead sheathing, too, goes back a long way, and was in use simultaneously with tar, but probably on large ocean-going craft only. The Roman wine ship (recently discovered) which was wrecked on a voyage from Delos to Marseilles about 230 B.C., was sheathed with 1/16" lead put on with lead-coated copper nails, the same being applied to her deck also. There are many instances of such lead sheathing in Roman times, but it was not used by later nations, with the exception of an occasional experiment like that of the English in the 18th century. I do not know when tallow was first applied to ship's bottoms, but it is doubtless a very old practice. Certainly most large sea-going vessels and warships employed it in the 17th century. About 1620, lead sheathing was introduced (or re-introduced) in warships and the practice continued on some vessels until 1770. About 1737 a coating of tar, pitch and brimstone was used successfully. In 1613 a Japanese junk of 800 tons was iron sheathed, but this was never a general practice. Copper was

tried and was in general use by 1780 or so, although American ships did not use it until after the Revolution. Composition metal, sometimes called "yellow metal" was introduced during the mid-19th century and was often used on clippers instead of the more expensive copper.

As to colors of various sheathing materials, the tar or pitch variations would be a brownish black - not a dead black. When tar and sulphur were combined with tallow, a rather dirty grayish brown would result. Tallow and sulphur ranges from a yellowish white to a light coffee color, while lead is a dull slate gray. Composition should be yellowish gold. Copper as often painted on models is a mixture of verdigris and white lead, often over copper paint, giving a grayish green cast with a glint of copper showing through (best stippled on) and is quite pretty. The only drawback is, that copper doesn't take on this shade unless exposed to the air for some time. It is usually a dirty brown after it has been in the water for a while, although it is admittedly not attractive on a model.

Small craft, as coasters, pinky fishermen, etc., were usually coated with tar or tar, tallow and sulphur, while green was a popular topside color, with a red or yellow stripe, for such craft during the first half of the 19th century.

o 0 o

SLOPCHEST

All items listed in the "slopchest" are subject to prior sale, and orders should be forwarded directly to the person listed. This service is available to all members at no cost, but the secretary reserves the right to limit number of items offered to the amount of space available.

Paul A. Ruddell, 7600 Colesville Road, Hyattsville, Md., offers the following:

"Famous Paddle Steamers", F.C. Hambleton, London, 1948, plans & details. $2.50
"The History of the Most Noted Pirates," NY, 1926, reprint, 295pp. $3.00
"Whaling and Fishing," Chas. Nordhoff, NY, 1895, 383pp. $2.25
"Buccaneers and Pirates of Our Coast," Frank R. Stockton, NY, 1917, 325pp. $3
"The Cruise of the Cachalot," Bullen, London, 1917, 375pp. $2.00
"Piratical Barbarity; Or, The Female Captive", NY, 1930, reprinted from a pamphlet of about 100 years ago. 48pp. $3.00
"Pirates and Amazons of South America," C. Montgomery Stevens, Chicago, 1902, 2 vols. in 1, paper yellowed. $3
"Admirals of the Caribbean," Francis Hart. Boston, 1922, 203pp. $4
"Pirate Tales from the Law," Arthur M. Harris, Boston, 1923, 324pp. $2.50
"The Naval Monument, Containing Official and other Accounts of All the Battles Fought Between the Navies of the United States and Great Britain During the Late War; and an Account of the War with Algiers, with Twenty-five Engravings To which is Annexed a Naval Register of the United States, Revised and Corrected, and brought down to the year 1836". NY, 327pp. $5.00
"Naval Battles of the World, Great and Decisive Contests on the Sea; Causes and Results of Ocean Victories and Defeats; Marine Warfare and Armament in all Ages; with an Account of the Japan-China War, and the Recent Battle of the Yalu. The Growth, Power and Management of Our New Navy", Edw. Shippen, Philadelphia, 1898, 811pp. $2.50
"Forgotten Clippers of the Great Lakes" and other articles of nautical interest in 6 copies "Travel" magazine, 1939. $1.80

INTRODUCTION OF NEW MEMBERS

TAMS BIXBY III, 214 Wall Street, Muskogee, Oklahoma - is interested in ship modelling and related nautical research.

GALE BLOSSER, 501 Gonzalez Drive, San Francisco 27, California - rejoined the N.R.G. recently after several years of inactive status. He is one of our "whaling" enthusiasts, and hope to hear more on the subject from him in the future.

HENRY A. BUDDE II, 410 North Andrews Avenue, Fort Lauderdale, Florida - advises he is a model builder interested in contemporary craft, a yachtsman, and member of the Society of Small Craft Designers (S.S.C.D.).

GEORGE S. DeVOE, Northrop Street, Bridgewater, Connecticut - is a collector of marine items, a yachtsman sailing mostly in the Long Island Sound area, and a potential modelbuilder when more leisure hours are available.

ED FRICK, P. O. Box 10278, Tampa 9, Florida - indicates he is a model builder interested in late 18th century sailing shops.

A GRIFFITHS, 2 Sealcove Drive, Toronto 18, Ontario, Canada. No report available at this time.

LEROY T. HERNDON, Jr., 314 San Juan Way, La Canada, California - tells us he is interested in model building and nautical history of the 1650 - 1830 period.

CHARLES I. LAMPEE, 9 Foxcroft Road, Winchester, Massachusetts - is the author of the Boston Pilot Boat story that leads this issue of the JOURNAL.

CARL LUND, 221 Elsie Street, San Francisco 10, California, was introduced to the Guild by his son Carl Bertal Lund who advises his father was born in Upsala, Sweden, followed the sea in windjammers, has an avid interest in all things pertaining to the sea, and now devotes his interest to ship model building. A later communication enclosing pictures of a Baltic trader built from plans by Harold Underhill prove beyond doubt that our new member (a youth of 78 years) is an excellent craftsman.

WARREN M. MOORE, 353 North Central Avenue, Ramsey, New Jersey - is a collector of frigate and clipper ship models, and was introduced to the guild by Mr. J. Shindel Kamp.

ROBERT E. ODELL, Jr., 1801 Clydesdale Place, N. W., Washington, D.C. is a modelbuilder who advises he has just completed a model of the ESSEX and is about to undertake the FAIR AMERICAN.

GENE BRUCE REID, Box 296, N.Y.S.M.C., Fort Schuyler, Bronx 65, New York - is a young man who is most interested in following the sea as a career. He is a model builder, period of interest 1830 - 1930, a member of the Dartmouth Historical Society (whaling), a collector of ship log books, ship account books, and similar items of nautical interest.

ALLAN M. SAUNDERS, 9550 S.E. 71st Street, Mercer Island, Washington - is another N.R.G. member returning to the active rolls.

WILLIAM D. SAWTELL, Copse Hill, Tower Road, Lincoln, Massachusetts, was introduced to N.R.G. by Daniel F. MacNeil. Mr. Sawtell is particularly interested in Liverpool Packets and is presently looking for a sketch, painting or model of the Packet Ship YORK.

JOSEPH MARTIN SCHENKEL, 415 E. 145th Street, New York 55, New York, indicates he is a model builder interested in sailing ships of the 1700 - 1800 era.

CYRIL M. SKOLA, Rte. 15, Box 229, Patapsco Avenue, Baltimore 20, Maryland, is a collector of books, period models and ship carvings. He is also a model builder whose period of interest ranges from the 16th to 18th centuries.

CLAUDE H. VENON, McKinley Street, Rowayton, Connecticut, was introduced by Mr. Charles J. Schreiber who advises that Mr. Venon is a highly skilled craftsman and model maker who has done extensive research in English craft such as Revenue Cutters and Trawlers. He is currently engaged in research on steel ocean carriers.

CAPTAIN ROSS WRIGHT, 667 - 39th Avenue, San Francisco, California - is reported by Commander James H. Willey to be interested in the Navy, Merchant Marine and all things nautical.

CHANGES OF ADDRESS

ERIC W. BABCOCK - 14 Colonial Drive, Chelmsford, Massachusetts
Mrs. BARBAR BELKIN - 249-15 51st Avenue, Little Neck 62, New York
JOSEPH R. BERTRAND - 7 High Street, Lynn, Massachusetts
JOHN BRIGHAM - 817 Dabney Drive, Henderson, North Carolina
JAMES W. COLLIER - 5300 Monument Avenue, Richmond 21, Virginia
COMMANDER GEORGE J. DAVIS USN - 52 Hunter Avenue, Newport, Rhode Island
CAPTAIN HAROLD F. DeLASAUX - P.O. Box 145, Mill Valley, California
ROY A. FRYE - AV Director, Roswell City Schools, 200 W. Chisum, Roswell, N.M.

BURTON M. HOLMES - 107 Highland Avenue, Grymes Hill, Staten Island 1, New York, N. Y.
HAROLD D. HUYCKE - 2332 North 136th Street, Seattle 55, Washington
ARTHUR P. IVES - 1916$\frac{1}{2}$ - 40th Street, South, St. Petersburg, Florida
ROBERT W. JACKSON - 5110 Baker Road, Hopkins, Minnesota
STEEN KOKBORG - 100 Morse Avenue, Groton, Connecticut
PHILIP R. MARKUS - 21619 Stratford Court, Oak Park 37, Michigan
DR. JURGEN MEYER - Forstweg 77, Kiel 1, Germany
JOHN W. MITCHELL - 1701 West 168th Street, Gardena, California
DR. JAMES F. MUMMA - 152 Darwin Drive, Snyder 26, New York
WILLIS L. NYE - 1719 Grove Way, Hayward, California

MAX O'STARR - 962 Sueirro Street, Hayward, California
RAYMOND E. PENDLETON - Post Road, Rt. #3, Westerly, Rhode Island
CHARLES J. SCHREIBER - 70 East 49th Street, New York, New York
RALPH C. SHEPHERD - Apartado 4418, Lima, Peru
E. VON DER PORTEN - 2924 Irwin Street, Vallejo, California
JAMES W. WILSON - 181 Holdman, Sierra Madre, California
ROBERT A. WEINSTEIN - 1047 South Atrus Avenue, Los Angeles 19, California
CHARLES H. WERTZ - 3505 Colonial Road, Harrisburg, Pennsylvania
WILLIAM JEROME WILLIAMS, Sr. - Box 304, Rt. 2, Richmond 29, Virginia

OBITUARIES

BRIAN BROWN, 47, art director of the Kiplinger Magazine "Changing Times" joined the Guild in 1955 to continue his research on the SEA WITCH. He spent five years reproducing a miniature scaled model of this vessel. He was a connoisseur and collector of fine bindings - particularly of nautical research works.

RICHARD ORR, 55, nationally known for ship models and other fine wood carvings was an energetic booster of the N.R.G. and many of our members first became acquainted with the organization in passing through the model shop at Mystic Seaport which was maintained by Dick for several years. Some of his most popular carvings were of transom eagles (photographs of which appear on the frontpiece of the JOURNAL) and several of his fine ship models are now on exhibit at the Peabody Museum, Salem, Massachusetts.

EDMUND B. HILL of Redwood City, California, was a member of the San Francisco Chapter of the N.R.G.

CHARLES G. DAVIS of Manor Haven, Long Island, New York, died last January 26th. Although Mr. Davis was never a member of the Guild, he was most famous for his books and plans for shipmodel builders and his works have been most popular for years. His sketches and articles on nautical subjects were frequently featured in YACHTING Magazine over a long period of years. Many of his best models are now on view at Mystic Seaport and Mariners Museum at Newport News, Virginia.

LETTERS TO THE SECRETARY

From Ralph C. Shepherd, Lima, Peru - - I have been back in Peru since last April . . was sorry to leave Sydney, Australia as I had many good friends there.. You will have heard of the loss of the four master OMEGA which occurred last year off of Callao. She was the last of the three square riggers which operated along this coast. The MAIPO and TELLUS were both broken up for scrap, but the OMEGA seemed determined to escape the scrappers yard as back in 1951 she struck a rock and sank off Callao but was refloated. This time she sank in deeper water so that it was not worth the expense of refloating her...

From Charles J. Schreiger of the Transorient Boat Co., New York City - - I am currently assembling photos and text describing the construction of Chinese Junks. I believe their unique method of manufacturing might be of interest to other members of the Guild. I have photos taken last spring at the Sau Kee Ship Factory in Hong Kong that show construction of a junk from the keel up. I plan to forward it to you for consideration upon completion.

From Herbert G. Purcell, Carmichael, California - - I had an interesting experience last November when the San Francisco Chapter N.R.G. held a joint meeting with the Drake Navigators' Guild. We visited a historic spot near Point Reyes, about 35 miles north of the city. We assembled at the San Francisco Maritime Museum and drove up the coast to Inverness. From there we detoured to the place where Sir Francis Drake made his land-fall in 1579. Most of the party hiked down the cliff and explored the spot where the famous navigator established a camp and repaired his flagship GOLDEN HIND....We returned to Inverness for an excellent dinner at Drake's Arms and everyone went home feeling it was a worth-while adventure.... The December "Naval Institute Proceedings" was unusually good and was particularly interested in the paper on the River Plate Battle. In 1909, I entered the employ of the Hawaiian Dredging Co. for the first work at Pearl Harbor. Shortly after my arrival in Honolulu, the Transport LOGAN went aground at the upper end of the harbor. She was pulled off by the British Cruiser AJAX which happened to be in port at the time - - an impossible task according to old-timers - - but accomplished just the same. According to Jane's, Commodore Harwood's flagship AJAX, commissioned in 1934, had plenty of speed and fire-power, but the older AJAX was also a smart little ship and manned by real sailormen...

From Dr. Douglas H. Robinson, Pennington, New Jersey - - Wish I could say that I have something on the fire for you, but have gotten sidetracked on a book on airships, and haven't even touched the CONFEDERACY in months. I have been assembling some material for an eventual clipper ship model, my choice so far having rested on Webb's CHALLENGE. Did you know that excellent plans of the ship as built exist in the British Admiralty Collection of Draughts, taken from the ship when she was in London in 1852. I have just received a fine photocopy from our generous friend Mr. Waite. In the meantime, excellent lines and sail plan of McKay's SOVEREIGN OF THE SEAS have come to light - - I believe the first ever found of this ship - - in a trunkful of old draughts made by one of McKay's apprentices. These are now preserved in the Peabody Museum in Salem. I have been interested in seeing these plans transcribed and preserved, and since the "SOVEREIGN" has come to light, perhaps I should do her.... (Note: on receipt of this latter advice, a request was dispatched to the Peabody Museum and the reply follows.)

From Assistant Director, Curator of Maritime History M. V. Brewington - Peabody Museum, Salem - - If you wish to include some mention of the McKay plans at Peabody, here is the story:

Sometime in 1925, a German book seller offered to the Museum a large roll of plans and paper tracings of plans. These included a number of drawings of vessels by Donald McKay. The Museum purchased the entire lot, but they were all so fragile

that no publicity has ever been given to the collection. Over the past year, thanks to "Doug" Robinson, we have been able to hire an expert marine draughtsman. He has carefully pasted together torn plans and traced each one to its full size on tracing cloth. The drawings and tracings were originally made by a German who worked not only in McKay's yard, but also in other shipyards in Europe and North America. Before long, we shall have a complete inventory of the plans and will be able to provide blueprints for those who wish them. No one set of plans is entirely complete. There are practically no deck details or construction details. This particular collection is only one of many at the Museum. For instance, we also have a collection of riggers' plans which include practically every type of vessel dating from about 1850 - 1895. These plans are all "hard-paper plans" and tracings have not been made so that photostats would be the only available reproduction method..

From Paul Palmer of Solvang, California - - There was very sad news about the Danish training ship DANMARK recently when she had to have a million kroner overhaul, and the government did not quite see it as worth while as a lot of voices were clamoring that sail-training was too obsolete these days. Only small repairs would be made so she could serve as a stationery training ship, but filled with all the modern instruments they use now. I guess she was saved by the bell though as more recent Danish newspapers indicate the big shipping concerns have agreed to help out by paying more toward the upkeep of the ship . . so it would appear she will sail again after all. The Danes have also an old frigate JULLAND a hundred years old, and the only one in existence in Europe from that period. She had gotten to the point where expensive repairs were indicated, and after many discussions pro and con...the whole problem resolved into the ship had to be preserved. So collections and lotteries have started and I suppose after restoration she will be moored alongside the Danish National Museum in Copenhagen....

From D. L. Dennis of St. Paul, Minnesota - - I have always taken a peculiar interest in the fore and aft rig and have tried to profit by any opportunities that presented themselves to acquire information about it. I wonder if an article on the lateen rig would be of interest to the readers of the JOURNAL? It would at least have the merit of novelty for there is nothing in printed English upon it and not much even in the literature of the Mediterranean countries. If you think favorably of it . . let me know.... (The secretary, on behalf of the members and himself, hope Mr. Dennis will oblige.)

From Clayton Smith of Monrovia, California - - I would like to find out how other model builders are making wreaths on ports, figureheads and similar carvings. I like the idea of reprinting some of the early articles from the JOURNAL and they should be very interesting as well as cutting down on the work load....

From Edward A. Mueller of Tallahassee, Florida - - At the present time I have cut out all of the little deck houses of the GREAT EASTERN. I used sepia prints for the windows and doors. Seems to work out very well. Have the paddle wheels and boxes finished and decking applied. Masts and funnels have been roughed out. Am about ready to assemble and start on the rigging. Certainly is a job as I made a pretty big model of pine. Even when half hollowed, the hull is awkward to life...

From A. G. Law, New York City - - TRUE Magazine for July 1958 is showing seven of my historic miniature ships in a double page, full color spread, with captions and short account of the work. They photographed these some 18 months ago and in the interim have succeeded in garbling up the ship names. They show a reproduction of my MARY CELESTE, a brigantine, as the clipper ship FLYING CLOUD. Please advise our NRG members the mistakes are those of the magazine, not mine, otherwise I might find myself classed in a lower order of landlubber than what I really am....

From Captain H. Pohlman of Wilmington, California - - I find in your publication the MON LEI report. I sailed her for several months. She came to San Pedro aboard a freighter, and her fabled long sea voyage is fake. We had to tell the visitors a tall one to make the craft interesting. You also left out the WANG-HO that arrived in San Pedro sometime in 1906. I sailed her from Portland to Seattle where she was exhibited as a captured war junk, also fake . . . I have sailed and been aboard many sailing ships for more than fifty years. I served under six national flags . . and worked at times as a rigger. I helped rig the STAR OF SCOTLAND and LA ESCOIESA. The latter sailed several times against the YOUNG AMERICA, an out and out clipper ship which is now a barge in the Seattle and Alaska run . . .

From Captain Fred K. Klebingat of San Pedro, California - - It is not generally remembered that the ERSKINE M. PHELPS operated as a sailing tanker for several trips between Port San Luis in Southern California and Honolulu . . It was the Union Oil of California that converted the ship into a tankship, and it was they who rigged her down after a few trips to Hawaii. At the same time, the company owned the wooden four masted barkentine FULLERTON which was also a tanker. The latter was not operated under sail but as a barge that was towed up and down the coast. Shortly after the purchase of the PHELPS, the FULLERTON was layed up for good . . .

From Commander James H. Willey, Secretary of the San Francisco Chapter of NRG - The thirty-fifth meeting ... opened with a dinner at the Red Chimney Restaurant on Friday evening, January 30. There was ample evidence of Skipper Lembke's successful administration in the large number of members and guests present. The meeting was opened with a salty address by the Skipper and was aimed at keeping us all on our toes and an even keel. He reminded those present of the most interesting trip to Drake's Cove and concluded with an introduction of First Mate Dan McClain who obliged with a description of how he progressed with the building of a steam schooner during the past seven years. . . After the dinner, all hands drove out to Dan's home to inspect his excellent model and admire his very well equipped shop. While here, the Skipper reminded everyone that Captain R. L. Lobez, President Emeritas of the Chapter, is on the sick list at the La Honda Home for the aged and infirm. Another Past President of the Chapter Captain Surridge was also on the sick list and "get well" cards were signed by all hands ....

From Roy Rogers of Brooklyn, New York - - I am really pleased to know that you are getting ready to issue a new edition of the JOURNAL. I hope this means that everything is back on the track and the other copies will soon be out. - - - The NRG means a lot to me. It is the only group in this country that caters to the special interests of the model makers. Publications like the "Mariners Mirror" have greater repute among scholars, but they seldom offer any material that the average amateur can use. For this reason I am now concerned about our future. I fear that unless publication of the JOURNAL can be put on a more definite schedule many members are going to drift away and the Guild will collapse. I don't want that to happen. - - I would like to see a six-times a year schedule. We can't hope to offer very much in any single issue so I think the magazine should be sent out frequently to keep it fresh in everyone's mind, and I also think that very few are going to fork over $5.00 for three or four copies. I don't know what other obligations you have. Perhaps you simply don't have the time to edit the JOURNAL. If you don't, I wouldn't blame you at all for saying so and asking for someone else to face up to the job. It is a thankless position I know, and as said before, I have been very happy getting the copies you have turned out. Frankly though, I can't see how we can continue to exist at the present erratic pace. I would appreciate having your opinion of the situation. If you have any ideas for improving things, won't you let me know. - - I still wonder if it wouldn't be better to separate the editor's and the secretary's jobs. As I see it, the editor has work enough just getting the magazine printed. - - - I don't see why he should have the additional burden of taking care of dues and answering members who simply want to write about their vacation....

QUERIES

10-2-1 From Fred Manning, Vancouver, Canada - - I am at present planning building a model of the FRAM - Fridtjof Nansen's ship, and wonder if you know where I can get plans of this ship. I was looking over some back numbers of the JOURNAL and noted that Mr. Honey of London had built a model of it a few years back - - - but cannot locate his address.. (Secretary's note: Last known address of Mr. Honey was forwarded, plus lead to Captain Finn Ronne USN - whose father served on the FRAM - and the Norsk Sjøfahrtmuseum, Oslo, Norway recommended for possible source of plans and ship details.)

10-2-2 From Edward A. Mueller, Tallahassee, Florida - - While finishing the GREAT EASTERN, I am also trying to run down details of the ship LANCING. She was a 4 masted sailing ship converted in the 1880's from the French steamer PEREIRE. I know that a man named Andrew Winters made a model of her in 1936. He lived in New York. Does any member know him? I am searching for plans of the ship, but it has been hopeless thus far. Can you help with data on the ship either as the LANCER or the PEREIRE? I have some photos of her under sail - - but need some more detailed shots showing her decks and some details of the hull. I contacted the Norwegian Maritime Museum at Oslo and am now going to try to contact descentants of the former owners. The Norwegian Museum has a model, but the builder died a year ago and presumably didn't use plans.

10-2-3 From D. L. Dennis, St. Paul, Minnesota - - I am contemplating attempting to make some (very small) brass castings and also some other work involving silver soldering and which might be termed jewelers work. I would like to get the names of books on these subjects and I thought you may know of some member versed in these matters to whom I might write.

10-2-4 From Mrs. Laura S. de Zerega, American National Red Cross, National Headquarters, Washington 6, D. C. - Would like to obtain a model of the first U.S.S. SOLACE for the Red Cross Museum.

10-2-5 From Kendall Rogers, Hawthorne, New York - Wanted on brass or bronze artillery, American, all before 1820, data and/or references on sources of ore, founding and commissions for private marine guns emphasizing Canadian and Louisiana sources, if any.

10-2-6 From Norris Randolph, 30 West St., East Greenwich, Rhode Island - - I am currently engaged in research on the LARCHMONT-KNOWLTON Collision off Block Island in February 1907. In assembling material for the story of this maritime disaster, I am endeavoring to collect as many facts as possible and any assistance will be appreciated.

10-2-7 From Clark Allen, Los Angeles, California - - I am building a Baltimore clipper slaver and would like information on deck arrangement, housing, topsides furnishings, etc.

10-2-8 From J. S. McCullough, New York 14, N. Y. - - I would like to get plans complete enough to build a model of the four masted wooden bark SHENANDOAH built at Bath, Maine in the 1890's.

10-2-9 From William D. Sawtell, Lincoln, Massachusetts - - I am seeking any information in regard to a print, sketch, model, or painting of the Liverpool Packet ship YORK. This vessel was built of live oak in 1824 by William Crockett in New York, with two decks and three masts. Length was 118'6", breadth 28'6", depth 14'3" and measured 433 & 46/95 tons. Square stern, round tuck, no galleries and a billet head. The YORK was a very fast ship and remained in service as a Liverpool Packet until 1831. She turned up in Edgartown, Massachusetts in 1841 and went into service as a whaler.

QUERIES (Continued)

On February 14, 1849, the YORK was purchased by the Pacific Company. The Marine Journal shows that the YORK sailed on April 1st, 1849 under Captain George N. Cheever of Salem with 38 passengers, and made her voyage around the Horn successfully. Arrived in San Francisco September 17, 1849. After this, the YORK made one voyage to Australia and on her return became a store ship in 1851. In 1882 the YORK was owned by Bolton, Barren & Co. of San Francisco and used to store Chili Flour, being anchored near California Street wharf.

10-2-10 From Carl Lund, San Francisco, California - - Can you help me obtain deck details of the CAROLINE, 4 masted schooner, built by Hall Brothers on Puget Sound in 1902. The plans in use for building a model of this craft are lacking in this respect.

10-2-11 From Roy Rogers, Brooklyn, New York - - is also looking for plans of the ship SHENANDOAH.

10-2-12 From F. Van Loon Ryder, 1515 Gist Street, Columbia, South Carolina - - During the past five years I have been working on a compilation entitled "Three Hundred Hudson River Sidewheelers with Pictures and Brief Histories" which I hope to publish. I lack about 15 pictures of reaching my goal of 300. I am attaching a list of the steamboats, pictures of which I am still trying to obtain, etc. (Note: The following list is not complete herewith, but a copy of the original request will be furnished to those asking.) STEAMBOATS: FIREFLY (1811); RICHMOND (1813); EMERALD (1826); EAGLE (1852); NOVELTY (1829); GOLDEN GATE (1852); ROGER WILLIAMS (1853); JOHN MARSHALL (1887); JOHN TAYLOR (1876); ISAAC SMITH (1860) - FERRYBOATS: ABBIE (1852); FAIRY QUEEN (1826); PIONEER (1824); JULIANA (1811); DUTCHESS & ULSTER (1834); JOHN T. WATERMAN (1858), etc.

-0- -0- -0-

BOOK REVIEWS

"SAILING SHIPS" introduced by Oliver Warner, published by the Ariel Press, London, England and distributed in U.S.A. by John de Graff, Inc., 31 East 10th Street, N.Y.3, New York (Paper back $7.50 - cloth additional).

This is a most colorful work and will be appreciated by all who love ship prints. There are 12 color prints in the collection on heavy art paper measuring 12" x 16" as well as a frontpiece in color of the ship MADAGASCAR. The prints are in the fashion of Currier and Ives only with more detail and careful execution. The text consists of brief paragraph descriptions of each vessel featured, headed with pen-and-ink drawings by Miss Susanne Kolasse. Our whaling members will be interested in the print of the UNCAS at the Cape of Good Hope (Le Breton) and the ship WEST AUSTRALIAN is sufficiently in detail to excite the interest of the clipper fans. The large prints can be removed from the paper back edition for framing. A very desirable addition to any nautical library. (Reviewed by J. W. Harbin, Jr.)

"THE SCHOONER THAT CAME HOME" by Harlan Trott, published by Cornell Maritime Press, Cambridge, Maryland ($3.50)

Mr. Trott has provided those of us who seek sea lore a history of one of the typical bald headed west coast lumber schooners, the C. A. THAYER. The origin of the vessel, its builder, and the last voyage of the sturdy old ship from Oregon to San Francisco is portrayed in a manner which makes one relive the ruggedness, anxiety and adventure of life aboard a 19th century sailing vessel. Perhaps the greatest contribution of this work is the difficulty experienced by those individuals who labored with patience to acquire and preserve a museum of actual sailing ships typical of those so important to our heritage. Too many of our people have lost

the significance of the struggle with the sea our forebearers shared. The men who crewed the THAYER on her last two weeks under sail came from many walks of life to relive together an experience which has become less and less frequent in these times. One of the able seamen was Karl Kortum, Director of the Maritime Museum of San Francisco, and member of N.R.G. His photographs of the ship and crew during the long voyage home add much to the work, and it is most pleasant to contemplate that this vessel will be restored and receive tender care under his able direction as museum director. The THAYER will be moored near the BALCLUTHA and provide another living sample of an almost forgotten accomplishment. (Review by J. E. Beach)

"PLANK-ON-FRAME MODELS and SCALE MASTING & RIGGING" Volume I, by Harold A. Underhill, published by Brown, Son & Ferguson, Ltd., Glasgow S.W.1, Scotland (32 shillings - approximately $6.50 at Karl F. Wede, Rt. 3, Box 195R, Saugerties, New York)

I know of no other reference source that has been more eagerly anticipated by shipmodel builders than the latest undertaking by Harold A. Underhill. The present volume contains an easy-to-follow text that is amply illustrated with detailed sketches by the author and plans (reduced scale) of the Brigantine LEON, the Brig "MARIE SOPHIE" and the Zulu "MUIRNEAG". Full size plans of the aforementioned are available if desired. Mr. Underhill's model plans are drawn on a generous scale, but in keeping with modern housing limitations for display purposes. The book contains step-by-step methods of constructing a ship model in the same fashion as the original ship. Elaborate and simplified methods are provided by the author so as to accommodate the novice as well as the experienced craftsman. No elaborate tooling up is required as most of the work can be accomplished with relatively simple and inexpensive hand tools. Volume I is devoted mostly to the construction of the hull, internal details of the same, deck structures and details of such, and fittings. Various types of hulls are discussed and methods of construction illustrated accordingly. Volume II will be devoted to scale mast and spar manufacture as well as rigging details. This book is a "must" for any ship model builder. (Staff review)

"SCHIFFSMODELLE" by Gerhard Timmermann, published by Urbes Verlag, Hamburg, Germany.

This is a very interesting little booklet illustrating the history of ship forms through the ages by means of a series of shipmodel photographs. The collection starts with the conventional canoe forms and progresses from rowing craft to sail to power in moderate progression. There are two color plates, which are well registered, of old sailing vessels but that is all. The remainder of the work is in black and white. A surprising number of modern craft are included in the study and cover all types of endeavor. Text is in German. Book measures 5" x 5½".

"THE DIVINE WIND" by Captain Rikihei Inoguchi, Commander Tadashi Nakajima and Roger Pineau, published by the U. S. Naval Institute, Annapolis, Maryland.

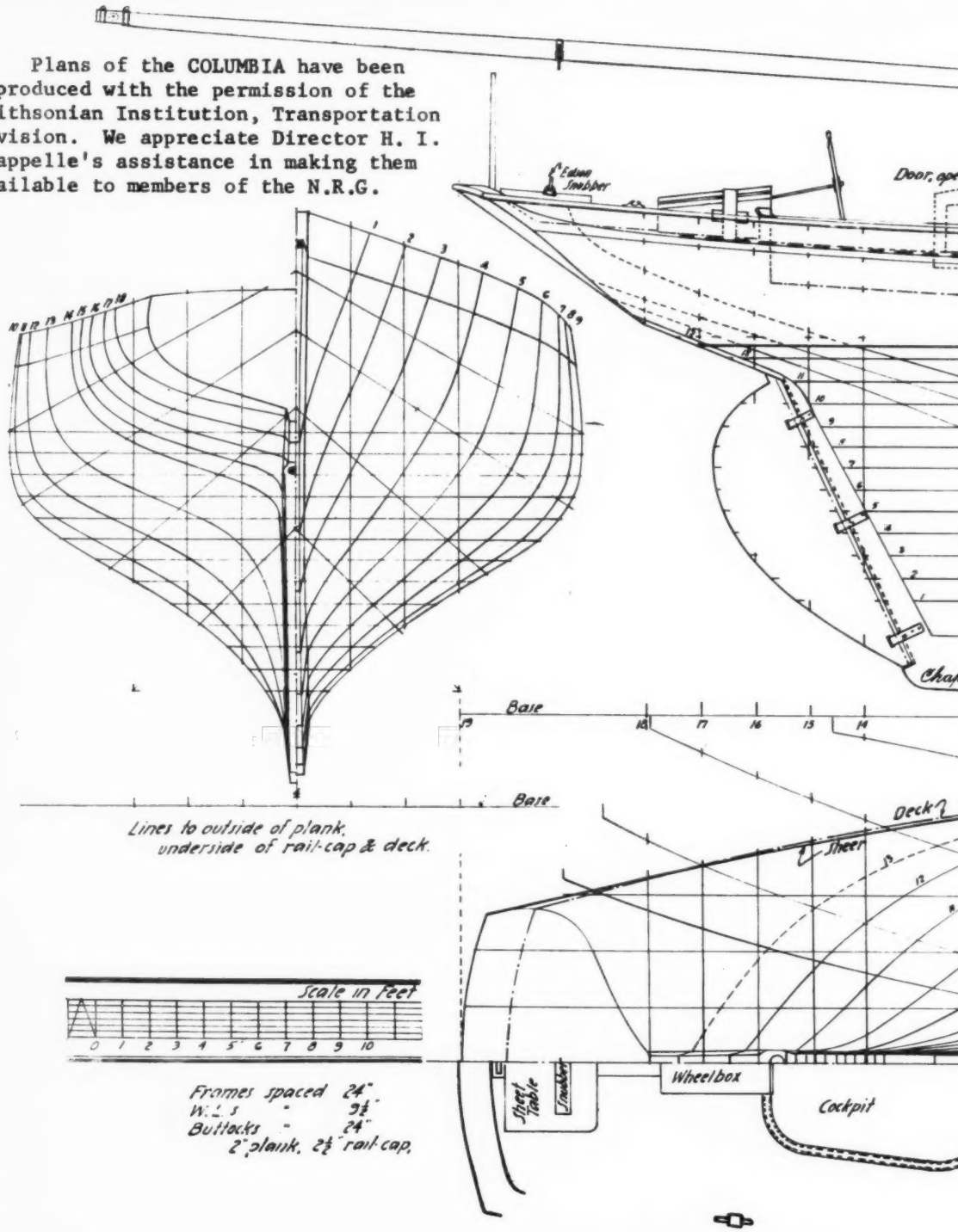
This is the story of Japan's Kamikaze Force in World War II, its formation, execution, and value as a weapon of naval warfare. Although this work is somewhat unusual in our field of nautical research, it certainly has value for those NRG members who are deeply interested in weapons of naval warfare and effective value. This story of how the Kamikaze Corps was organized as a desperate effort to salvage Japan's war effort and save the homeland is related simply and dramatically. The oriental viewpoint of honorable self destruction in carrying the war directly to the enemy is strange to the occidental way of thinking, and it is most interesting to have an opportunity to compare viewpoints. Methods of attack and observation are explained in sufficient detail to be followed by the casual reader and the appendix contains additional data of value for a more thorough study. The "Ohka" bomb is also described in sufficient detail to understand how and why it was employed as a weapon of destruction. Numerous photographs reflecting damage suffered by vessels of the United States Navy from Kamikaze attacks testify to the effectiveness of these weapons. This is a thought-provoking book, well written, and worth reading.

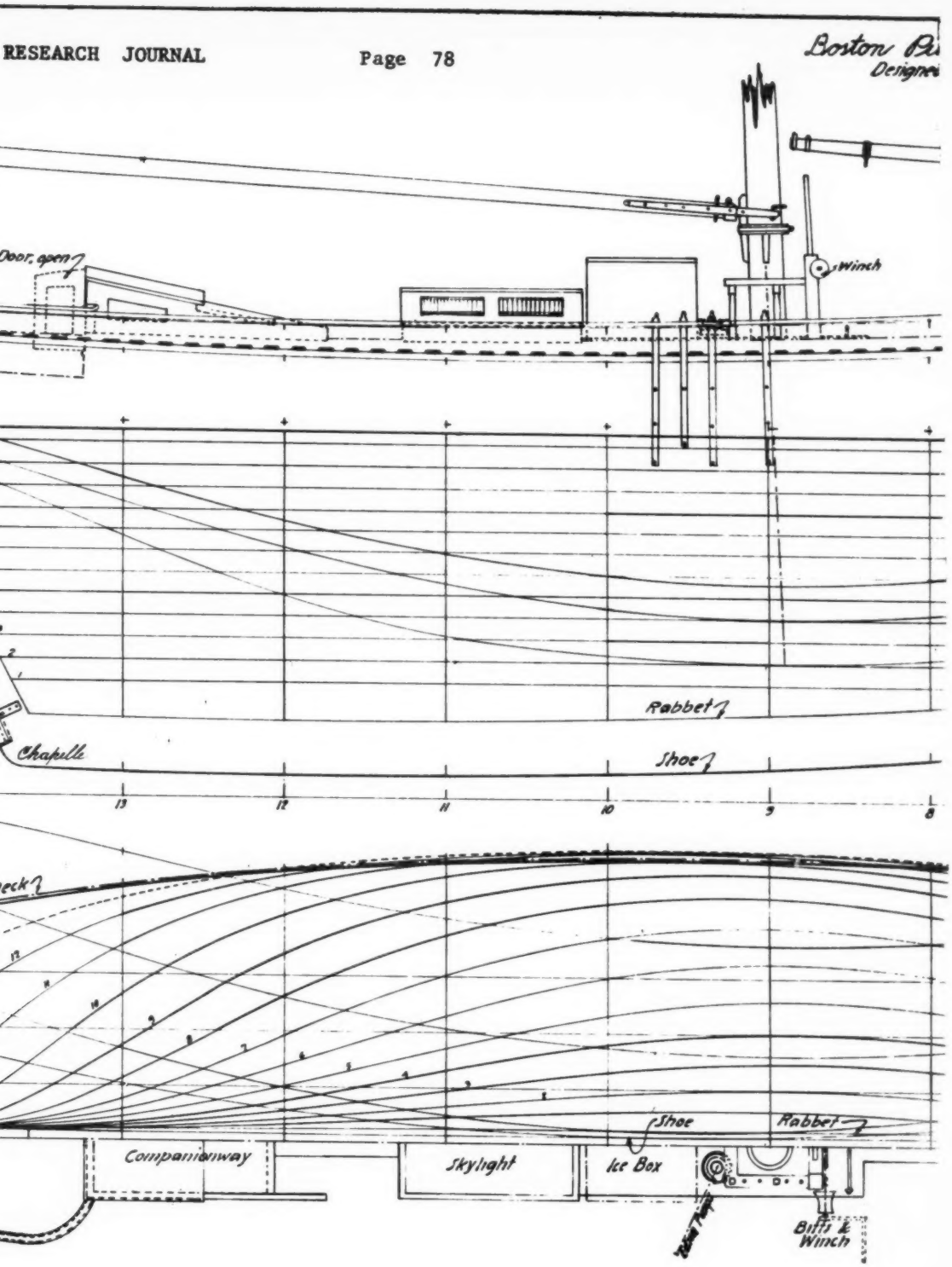
PLANS OF THE PILOT SCHOONER "COLUMBIA"

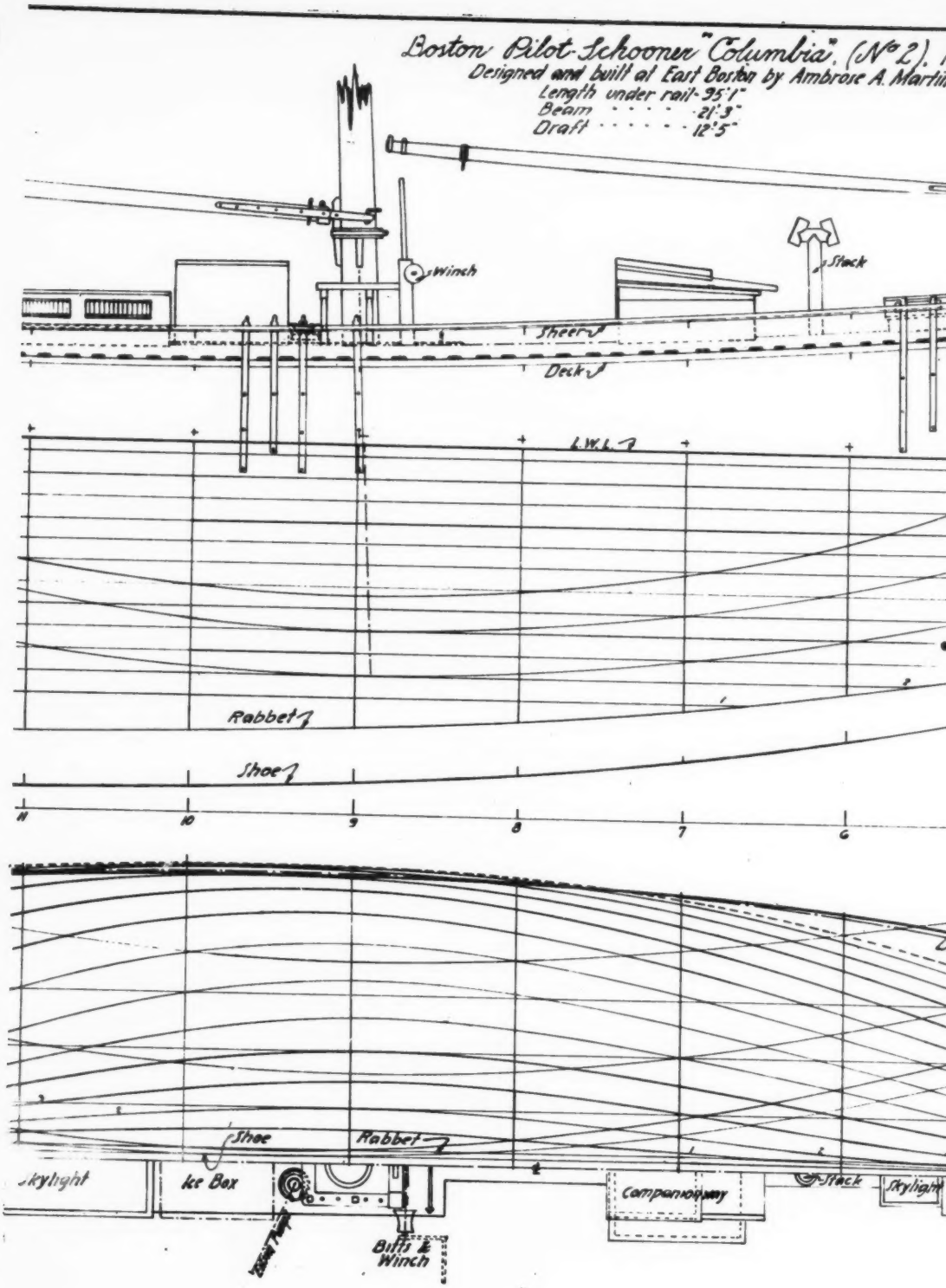
We are indebted to the Transportation Division of the Smithsonian Institution for permission to publish the plans of the Boston Pilot Schooner COLUMBIA. The original draught was completed only recently, and it was most generous of the Museum authorities to provide members of the Guild with this unusual data.

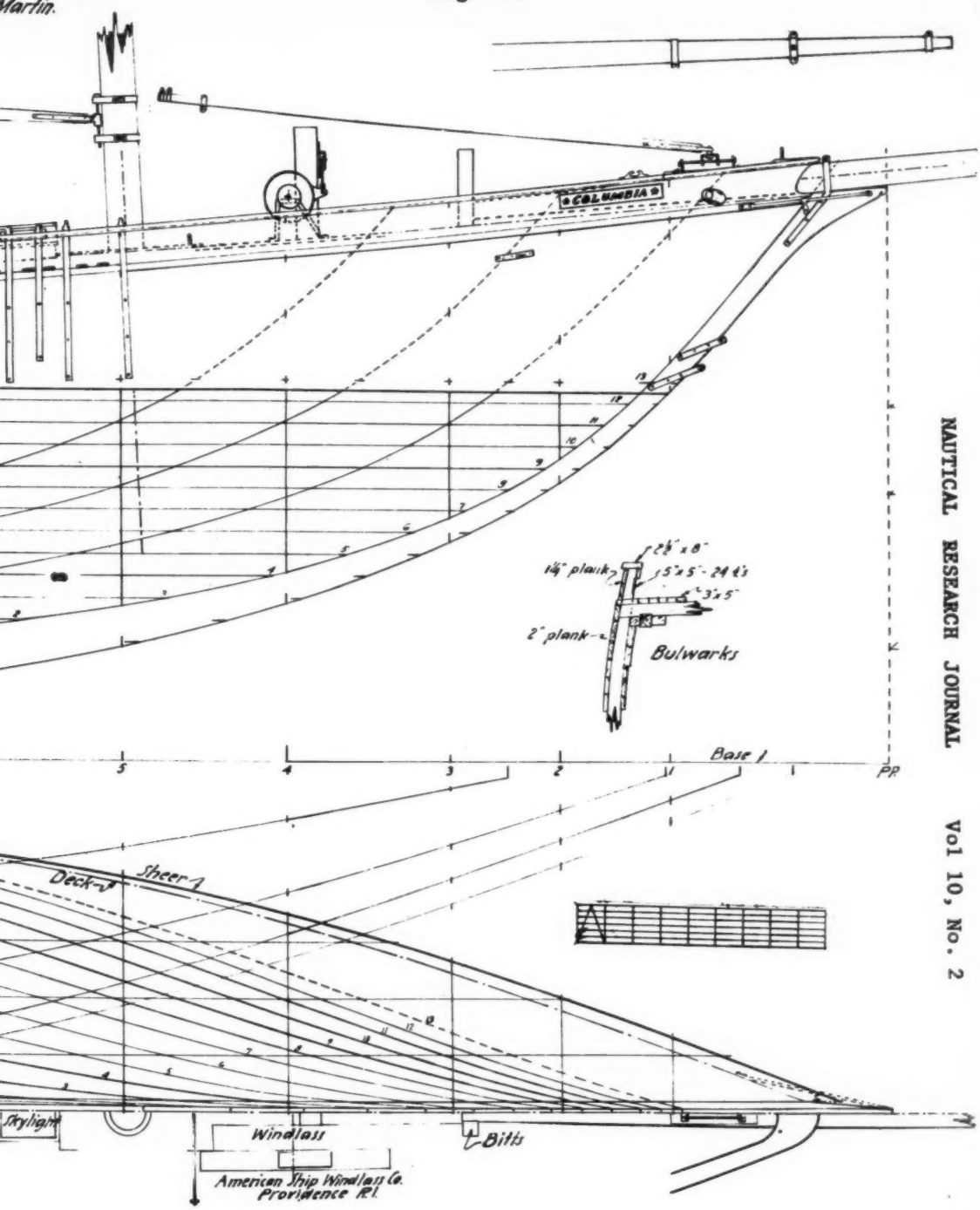
You will note there has been a departure from the usual manner of presenting ship plans in that the principal plate has been split so as to permit on a larger scale than would be otherwise possible. Modelbuilders and others wishing to combine the sheets so as to form one plan will find a generous overlap has been provided. There should be no difficulty in lining up both draughts into an accurate whole, particularly if worked on a light board or similar device. Full size blueprints (3/4" - 1' scale) may be ordered from the Museum at a moderate cost.

Plans of the COLUMBIA have been reproduced with the permission of the Smithsonian Institution, Transportation Division. We appreciate Director H. I. Chappelle's assistance in making them available to members of the N.R.G.

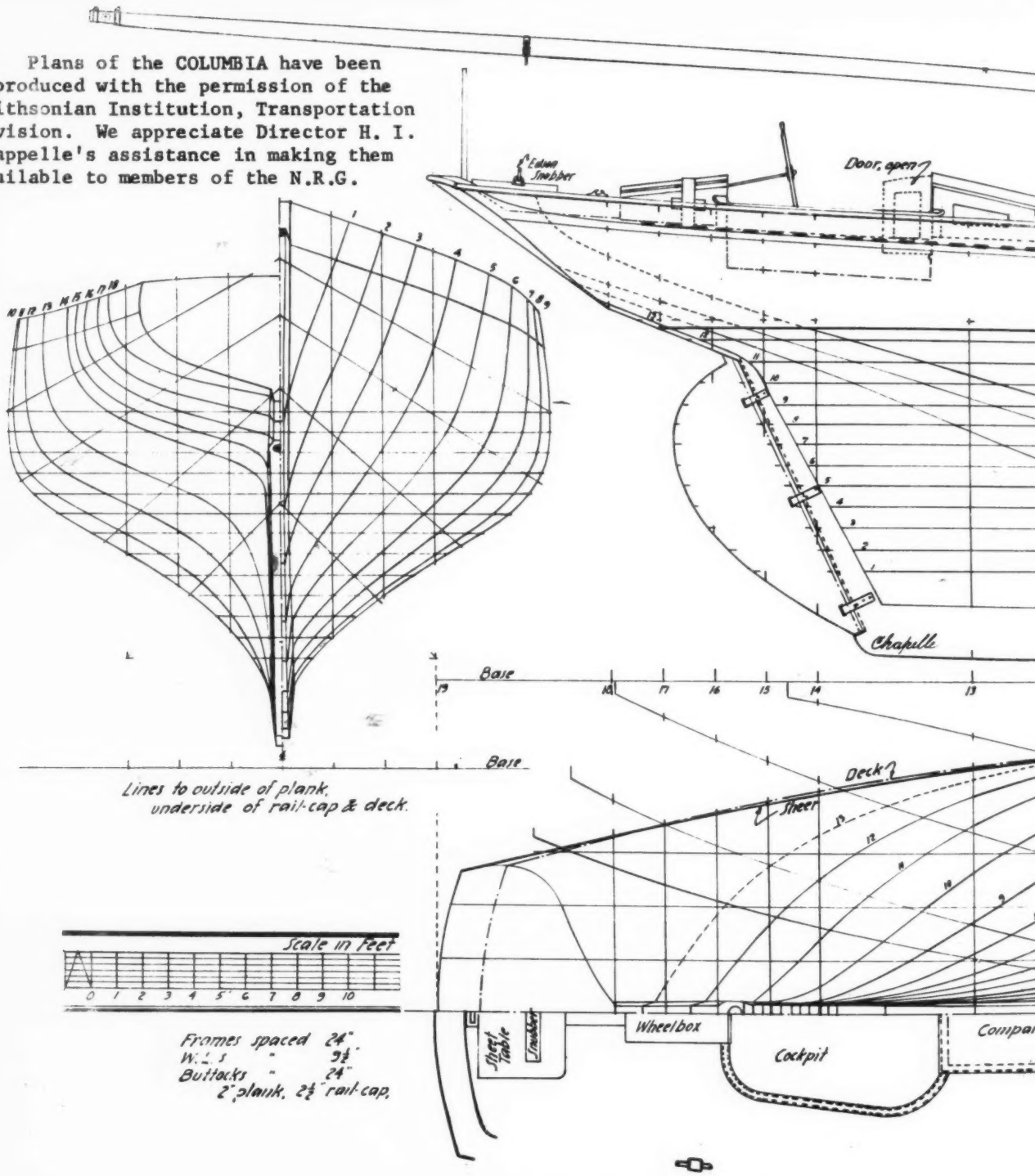



Boston
Designe
Door, open
Winch
Rabbet
Chapulle
Shoe
13
12
11
10
9
8
Companionway
Skylight
Ice Box
Shoe
Rabbet
Bitts &
Winch

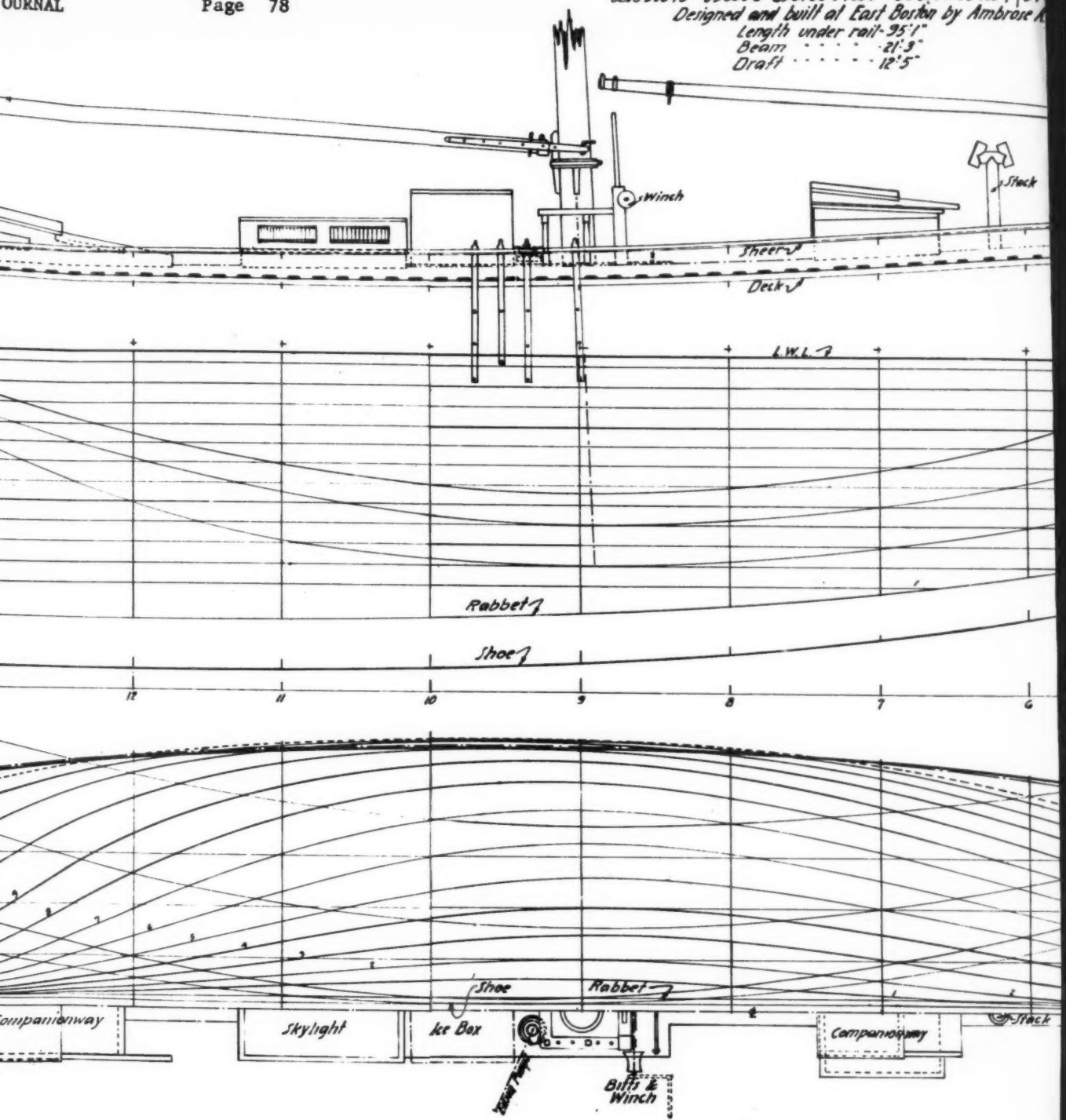

Boston Pilot-Schooner "Columbia". (No 2).
Designed and built at East Boston by Ambrose A. Martin
Length under rail - 95'1"
Beam ..... 21'3"
Draft ..... 12'5"
Winch
Stack
Sheer
Deck
L.W.L.
Rabbet
Shoe
11
10
9
8
7
6
Shoe
Rabbet
Skylight
Ice Box
Companionway
Stack
Skylight
Bitts & Winch

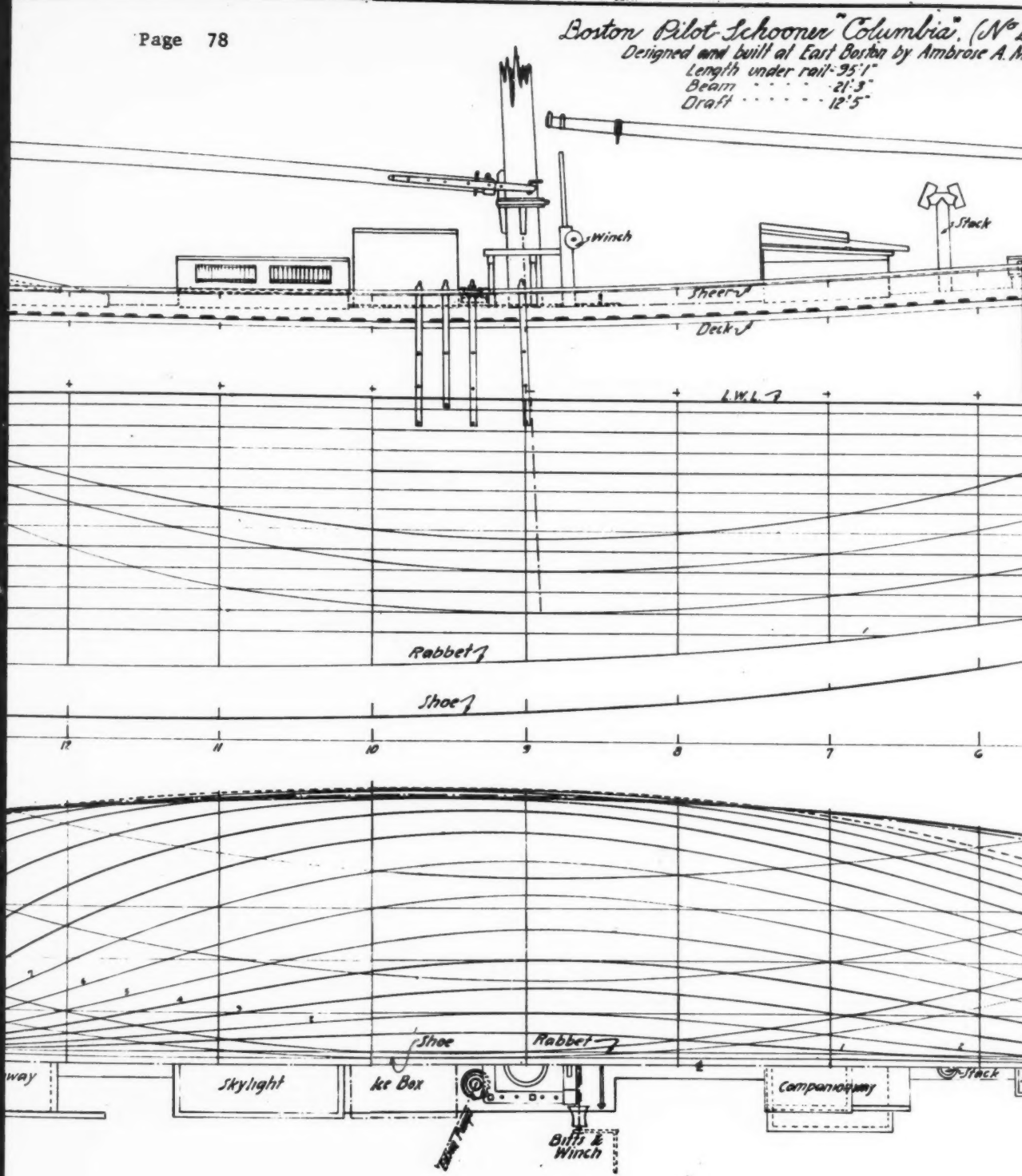

COLUMBIA
1¼" plank
2" plank
Bulwarks
Base 1
PP
Deck
Sheer
Skylight
Windlass
Bitts
American Ship Windlass Co.
Providence R.I.

Plans of the COLUMBIA have been reproduced with the permission of the Smithsonian Institution, Transportation Division. We appreciate Director H. I. Chappelle's assistance in making them available to members of the N.R.G.

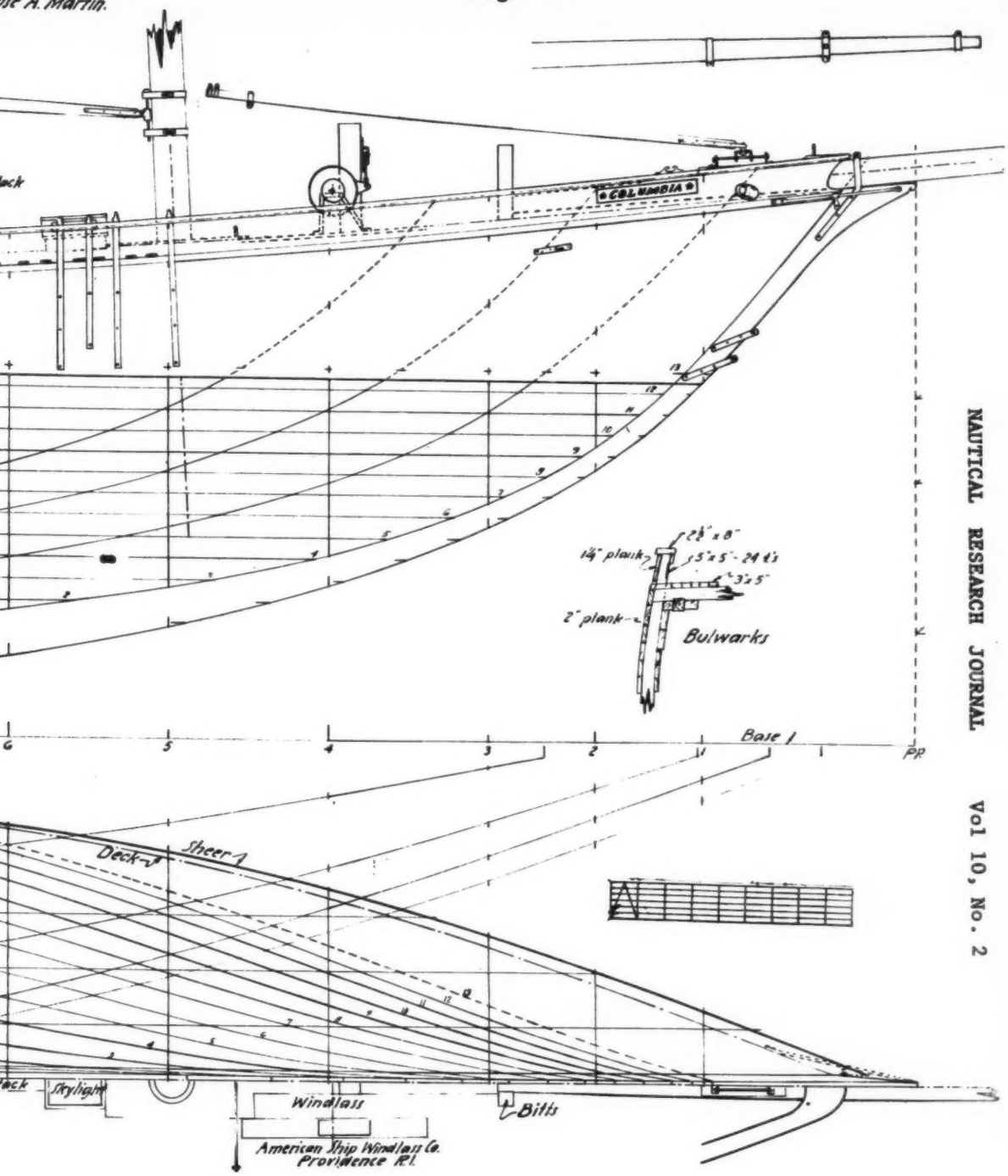


Boston Pilot-Schooner "Columbia". (N
Designed and built at East Boston by Ambrose K
Length under rail-95'1"
Beam . . . . 21'3"
Draft . . . . . 12'5"




Boston Pilot Schooner "Columbia". (No
Designed and built at East Boston by Ambrose A.
Length under rail - 95'1"
Beam ..... 21'3"
Draft ..... 12'5"
Winch
Stack
Sheer
Deck
L.W.L.
Rabbet
Shoe
12
11
10
9
8
7
6
Shoe
Rabbet
Skylight
Companionway
Stack
Bitts & Winch

(No 2). 1894
se A. Martin.



NAUTICAL RESEARCH JOURNAL Vol 10, No. 2

The NAUTICAL RESEARCH JOURNAL is published by members of the NAUTICAL RESEARCH GUILD. Membership dues are $5.00 per annum and include all issues of the Journal published during the year, plus index of the current volume, plus copy of the latest Membership Roster. New members receive the numbers which have been previously issued in the current year.

Dues are payable January First of each year and are in force until receipt of the written resignation of the member. Opinions and assertions appearing in the Journal are the private ones of the writers. All rights are reserved and republication of material published should not be accomplished without the permission of the secretary.

The NAUTICAL RESEARCH GUILD is a non-profit and co-operative organization founded in 1928 by Harry D. Hamilton. All income of the Guild is used to defray publication and business expenses of the organization. No officer or member received any monetary compensation for his contribution.

Senior Director John J. Flynn, 1625 Wilson Avenue, Chicago 40, ILLINOIS
Editor Roy Rogers, 5001 Fourteenth Avenue, Brooklyn 19, NEW YORK
Membership Chairman Willis L. Nye, 1719 Grove Way, Hayward, CALIFORNIA
Secretary - Treasurer James W. Harbin, Jr., 4011 Beall St., Landover Hills, MARYLAND

NOW HEAR THIS !

The Secretary deeply regrets the lengthy delay in presenting this issue of the JOURNAL and can only offer the explanation that pressure of private affairs made this course necessary. Every effort is being made to prevent a recurrence and it is anticipated that the remaining issues of Volume Ten will be available before the fall season. With a bit of luck and cooperation of members of the Guild, it is entirely possible that a start will be made on Volume Eleven before the close of the year. That is the target, and your assistence will be appreciated.

As this number goes to press, it is a pleasure to announce that Roy Rogers has volunteered to take over the duties of editing future issues of the JOURNAL. He will be primarily responsible for preparation of manuscript for publication. The Secretary will continue to publish and distribute the JOURNAL as copy is made available. He will also take care of routine correspondence and financial details as heretofore. Mr. Willis L. Nye will have charge of new memberships - a chore that he has handled splendidly for many years - and Mr. John J. Flynn will serve as Senior Director of the organization. All other members of N.R.G. are reminded they, too, are important, and that is is their voluntary contributions of time and research that makes the Nautical Research Guild a worthwhile undertaking.

Volume Ten of the Nautical Research Journal will consist of four issues, a new membership roster and index. All members who have paid 1958 dues will be considered in good standing until Volume Ten has been completed. Those members who have forwarded 1959 dues will be in good standing until Volume Eleven has been completed. In order to be included in the latest membership roster it will be necessary for the member to have paid dues to cover the cost of Volume Ten, e.g. 1958 dues. Whether or not Volume Eleven will continue as a quarterly or advance to bi-monthly issuance once more depends largely on the amount of cooperation Editor Rogers receives from members. The editor cannot prepare copy for publication unless it is made available by the members, and remember a column clipped from a newspaper or magazine - and forwarded with no other preparation - can hardly be classed as an original manuscript.

Another item to be remembered is that postal and printing costs during the past year have increased. The treasurer has no intention of recommending an increase in dues unless absolutely and desperately necessary. You may be sure that production and secretarial costs will be kept within the limits of funds available for the purpose.

During the month of April, 1959 - The Richmond Ship Model Society will display ship models and nautical exhibits prepared by their members at the Mariners Museum, Newport News, Virginia. This is their first show in this most attractive location, and if you are in the area don't miss it.

The 29th annual exhibit of the Washington Ship Model will again be presented in the rotunda of the National Museum, Smithsonian Institution (Arts & Sciences Building) during the month of May. This show will likewise furnish a good excuse to visit a world-famous museum and see for yourself how modern display techniques are replacing antiquated lighting and hodge-podge collections of historic devices and models.

On November 29th, the Constellation advanced another step toward permanent enshrinement when she was towed to Booz Brothers Shipyard (Baltimore) for replanking. Cost, including contributed materials, has been estimated in excess of $80,000. When the ship was moved across the harbor, the U.S. Marine Band played martial airs, salutes were fired and H.M.S. Frigate ULSTER stood at attendion during the ceremony. Two tugs from the Curtis Bay Towing Company shifted the CONSTELLATION to her new berth while U.S.S. HAMPTON, U.S.C.G. APPALACHIA and icebreaker LATROBE stood by along the course. The latter vessel is believed to be the last of the paddle steamers on Chesapeake Bay. Her sister ship ANNAPOLIS has already been slated for the wreckers.

SLOPCHEST

All items listed in the "slopchest" are subject to prior sale, and orders should be forwarded directly to the person listed. This service is available to all members at no cost, but the secretary reserves the right to limit number of items offered to the amount of space available.

Charles F. Davis, 715 Del Riego, Encinitas, California - offers the following books:

"Down Easter" by Bragdon $2.50
"Boatbuilding" by H. I. Chapelle $5.50
"Yacht Design & Planning" by H. I. Chapelle $4.50
"Greyhounds of the Sea," by Carl Cutler $25.00 (First edition)
"Miniature Racing Yachts" by Darling $5.00
"Steamboat Days" by J. W. Adams - - price not quoted
1955 "Nautical Research Journals" price not quoted
"Science Museum - Sailing Ships" price not quoted
"Barbary Wars" - G.P.O. price not quoted

"Manual of Ship Model Making" (Popular Science) $2.00

"Maritime History of Maine" by Rowe $4.00

F. N. Williams, 5151 N. E. 14th Terrace, Pompany Beach, Florida - offers the following:

"Officers Journal for use of Officers of the Royal Navy," H.M.S. CORNWALL, 8/5/1905 to 11/1906. Handwritten by Lt. Douglas Stainforth. $6.00

"Officers Journal, H.M.S. SPHINX", Handwritten Nov. 1867 to Jan. 1872 $6.00

"Logs of H.M.S. VICTORY, H.M.S. DEVASTION, H.M.S. BACCHANTE, H.M.S. SUTLEJ" from Dec. 1861 to Dec. 1863, with 12 track charts and 15 small watercolors. $50.00

"Square Rigger Days," C. W. Domville-Fife $6.00
"Opium Clippers," Lubbock (1933) $8.00
"American & British Clipper Ships," Jacques and Helen La Grange $20.00

* * * * *